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# The Journal OF THE Michigan State Medical Society ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOLUME XXIII. No. 9 WHOLE NUMBER 265 GRAND RAPIDS, MICH., SEPTEMBER, 1924

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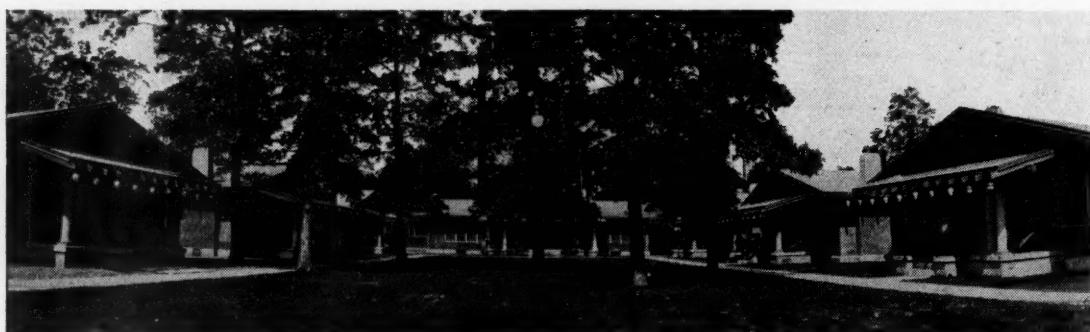
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# The Journal OF THE Michigan State Medical Society

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

Vol. XXIII.

GRAND RAPIDS, MICHIGAN, SEPTEMBER, 1924

No. 9

## Original Articles

### HISTORY OF HOMEOPATHY IN THE UNIVERSITY OF MICHIGAN

C. B. KINYON, M. D.

(Formerly Professor of Obstetrics and diseases of women in the Homeopathic Medical College, U. of M.)

While gathering the material for this article we have repeatedly been overwhelmed at the abundance of the facts at our command.

For virtually three quarters of a century the question of homeopathy has been agitated continually both before the legislature and the Board of Regents. This agitation has come from both within and without. Much of it has at times assumed a political character. This makes it extremely difficult to sift the wheat from the chaff. As a matter of fact the Homeopathic Department has caused the Regents more worry and anxiety than all the rest of the University during these years. How many times have we been amazed at their patience and forbearance.

It is my unqualified opinion that the amalgamation of the two Medical Schools of the University of Michigan as put in force by order of the Regents on June thirtieth, 1922, is the most perfect system of Medical Education yet devised; as they aim to teach a knowledge of Homeopathic Materia and Therapeutics as well as all else that pertains to the care and cure of the sick. In fact all that has to do with the relief of the ills of mankind.

The Medical Department of the University of Michigan was founded in 1850 and the first course of lectures was delivered in the School Session of 1850 and 1851.

The subject of homeopathy was first heard of in the Annals of the University in 1851. In that year certain citizens petitioned the legislature to abolish the Department of Medicine and Surgery unless some homeopathic professors should be added to the faculty. But the legislature took no action.

At this time the law was such that the terms of all members of the Board of Re-

gents expired at the same time and an entirely new Board was installed. When the old Board of 1851 turned over the work to the new Board it made a full report of its stewardship. This report or memorial as it was called was quite lengthy and was under two principal heads.

IC7 ED The first was for the guidance of incoming Board.

The second was for the purpose of making some reply to the honorable committee of the House of Representatives at Lansing, who, though its chairman had pronounced the University a failure and also to furnish an answer to those citizens who had petitioned the Legislature to abolish the Medical Department unless homeopathic instruction was provided for.

After giving in full the manner in which it had administered the Medical Department the Board, through a memorial (written by the way, by Dr. Zina Pitcher) gave utterance to the following language, "Shall the accumulated experience of three thousand years be laid aside because there has arisen a sect in the world which by engraving a medical dogma upon a spurious Theology has built up a system so-called and baptized it Homeopathy. Shall the high priests of this spiritual school be especially commissioned by the Regents of the University of Michigan to teach the grown-up men of this generation, etc."<sup>1</sup>

In 1855 the legislature added to Sec. 87 of the Organic Law of 1851 this provision: "There shall always be one professor of homeopathy in the Department of Medicine and Surgery of the University of Michigan." This same Organic Law of 1851 also gave to the Regents the power to enact ordinances, by-laws and regulations for the government of the University. To elect a president, to fix, increase or reduce the regular number of professors and tutors, to appoint the same and fix their salaries, etc.

The Regents took the case to the State Supreme Court. In January, 1856 this court decided that the Act of 1855 was unconstitutional and not for the best interests of the

<sup>(1)</sup> This memorial is given in full in Spearman's "A System of Public Instruction," pp. 312-368.

University. The court held that if this request were granted the legislature could add to or take from the faculty any number of teachers and thereby demoralize the whole University.

Owing to the excitement incident to the Civil War the subject of homeopathy was not again introduced until in March, 1866, when Doctors Woodruff and Drake, as a committee of the Michigan State Homeopathic Society, sent a communication to the Board of Regents, asking that a chair of Homeopathy be established in the medical Department of the University of Michigan. This was referred to the medical committee of the Board of Regents, but that committee never made a report.

In 1867, the Board of Regents were greatly embarrassed for want of funds to carry on the work of the University and applied to the legislature for aid. The legislature granted aid by giving the University 1/20 of a mill on all the taxable property of the State, but with the proviso that there shall always be at least one professor of homeopathy in the Department of Medicine in the University. Rather than appoint a teacher of homeopathy the Regents preferred to do without the 1/20 mill tax (or \$16,000 a year), but, at the same time tried to establish such teaching elsewhere in the state and in March, 1868, called upon the Auditor General to issue his warrant for \$3,000 for its support. This he refused to do.

In 1869, the legislature granted a liberal appropriation to the University without the homeopathic "rider" and from then on has continued to grant them.

At the first annual meeting of the Board of Regents in 1868, President Haven made a report upon the teaching of homeopathy in the University. He entered into a long and very able argument upon the subject and in five printed pages gave cogent reasons on both sides of the subject.

This was fifty-five years ago and, notwithstanding the changes of fifty-five years, what he then said has proved to be true. His reason for going into the subject so fully was that the Board wanted and really needed the sixteen thousand dollars from the mill tax.

But the President earnestly advised against the teaching of homeopathy in the University. He insisted that if it were taught the University would be a place of discord, which experience has proved to be true.

In December of the same year, 1868, the Board of Regents passed a resolution strongly disapproving of a member of the

medical faculty giving lectures against homeopathy, in his classes.

During the school year of 1868-69 a very interesting episode occurred in connection with the work of Dr. Hempel, who had been appointed by the Board to give lectures on homeopathy. One of the professors announced that the next day Dr. Hempel of Grand Rapids was to give a lecture on homeopathic medicine and suggested that the students meet him at the station. A mere hint was sufficient. He was met at the train by Professor Moses Coyt Tyler, and escorted to his carriage and they started up the hill for the University. Very soon a large concourse of medical and other students gathered about the carriage and began to pelt it with ancient eggs and other materials. This so frightened the good doctor that he asked to be taken back to the station. This was done and he returned to his home in Grand Rapids on the first train. This was the only attempt that Dr. Hempel made to lecture in the University. (One can imagine how different the outcome had Dr. Jones been in Dr. Hempel's place.)

In June, 1869, Dr. Hempel put in a claim against the University for his salary. This was referred to a committee of the Board. In August, 1869, the committee gave a lengthy report, claiming that inasmuch as he gave no lectures the Board was under no obligations to pay him a salary. The Supreme Court sustained the Board.

In January, 1872, the committee of the Medical Department of the Board was appointed to consider the status of professors holding positions in the Detroit Homeopathic College. In March, 1872, the committee gave an exhaustive report upon the subject. This report was decidedly adverse to any professor connected with the University holding a position in the Detroit Homeopathic College.

In 1872, the House passed a bill (House Bill 500) for the appointment of two professors of homeopathy in the Medical Department of the University, but the Senate tabled the bill. The Journals of the Senate and House and the reports of the Board of Regents contain numerous petitions, resolutions and memorials upon the subject of homeopathy at that time. Many and vigorous were the arguments pro and con.

In September, 1871, the Regents appointed a committee from the Board to take under consideration the advisability of establishing a Homeopathic Medical College to be connected with the University at some point other than Ann Arbor. This subject has also been acted upon by the Board at its June, 1871 meeting. Dr. Ellis

of Detroit, argued before the Board in favor of this, i. e., that the school be located at Detroit. At this same session, June 1871, a memorial was presented to the Regents, signed by citizens of Detroit, offering land for a location and money for the erection and conduct of such a school to be connected with the University.

The Regents promptly and unanimously accepted this offer and adopted a resolution declaring that when they were authorized by law to make such a school a part of the University, with proper provision for its support they would administer its affairs to the best of their ability. This offer of the Regents to the citizens of Detroit was renewed in 1873, but as Detroit did not fulfill its promise the Regents did not establish such department in Detroit.

Early in 1875 the Board of Regents again reaffirmed their former resolutions declaring their willingness to establish and take official charge of an independent school of homeopathy whenever funds should be provided for its support.

In March, 1873, the Board of Regents appointed a committee to report on the subject of teaching homeopathy in the University of Michigan. This committee reported adversely to such teaching in the Medical Department of the University.

On March 20, the same year, 1873, the House of Representatives appointed a committee with instructions to proceed to Ann Arbor and obtain testimony on the subject. This committee at once went to Ann Arbor and took the testimony of nineteen well versed and responsible witnesses, members of the University faculty. The testimony covered one hundred and ten closely written pages of legal cap paper and is before me as I write.

The questions covered two points. First, did the witness think that homeopathy could be taught successfully in the Department of Medicine and Surgery of the University. Second would it be better for all concerned to teach it elsewhere? If so, should it be a part of the Medical Department or a separate department. I will choose but eight out of the nineteen to wit: President Angel, Judge Cooley, the eminent jurist, Rev. Geo. R. Williams, for thirty-two years professor of physics in the University, Prof. Olney, the noted mathematician, Dr. Cocker, professor of moral and mental philosophy in the University of Michigan, and one of the greatest logicians of his time, Dr. Adams, professor of history in the University of Michigan, Dr. Douglas the able chemist and last, but not least, Dr. Ford, the greatest teacher in Anatomy of this or any other

age or country. These all testified that to teach homeopathy in the Medical Department would necessarily kill the medical department. Some thought it would ultimately kill the University. This last statement was based upon the fact that when the Medical Department was founded there were but sixty students in the whole University and the first year's class in the Medical Department alone was ninety and from then on the University as a whole made rapid strides. In the early 70's the Medical Department alone had as high as 525 students. When it was decided by the legislature in 1873 that they must teach homeopathy all of the medical faculty resigned and no one could be found to take their places. Not one of these eight witnesses was at all prejudiced against homeopathy and some of them employed it in their families.

They all agreed that it would be better to teach it elsewhere as a separate department.

We will now quote the witnesses:

PRESIDENT ANGELL

President Angell:

Question: What, in your opinion, would be the result if two professors of homeopathy were installed in the Medical Department of the University?

Answer: I have given that subject some consideration and made a great many inquiries to get at something that would help me to a conclusion and the best information I can get leads me to think that it would deter many students from coming here. Nearly all of those who do not want to be prepared for homeopathic practice, I think consequently, that the attendance would be very much smaller, and ultimately must either make a Homeopathic school entirely or break up the Medical Department entirely.

I say this because from the best information I can obtain in consulting with physicians of the state and in different parts of the state I think they would not be disposed to recognize diplomas of students who should graduate from here. Under those circumstances and from this fact allopathic students would not come here. I do not debate the question whether that is right or wrong, or unwise, but I am pretty firmly persuaded that this is the fact. I also think a diminution in the attendance of the medical college—a serious diminution would necessarily affect the other departments.

Every year students come to the Literary Department, for instance, who are brought here by a medical student.

I say all this without a particle of prejudice to homeopathy. I employ a homeopathic practitioner in my family.

Question: Do you know of any other medical school where medicine is taught as it is here, where they have endeavored to combine a homeopathic school with it?

Answer: I think it was tried in Europe at one time and the experiment was a failure. I think I have heard it stated so, I know of no such school now. I think it was in Europe, but I may be in error. (See Footnote.)

(2) Upon this point Prof. D'Ooge testified that during his three years' sojourn in Europe and after repeated inquiry upon that point, he found that it had been discontinued.—Author.

Question: I would like to ask you, Mr. President, what proportion of the students that come here to the medical school graduate from here?

Answer: It must be about one-fourth, I think. The attendance is about 350, and about 80 graduate.

Question: If two chairs of homeopathy were introduced in the school, would that three-fourths of students who go from here probably be received cordially in other schools?

Answer: I suppose not.

Question: If a Homeopathic Medical School, as a separate department of the University, were established in some other city, would that operate injuriously upon the University as a whole, or upon the Medical Department?

Answer: I have no reason to think it would.

Question: Would not that be the best way to dispose of the matter in this case?

Answer: I have thought so.

Question: Would there be any objection in that case to the diploma being signed by the Board of Regents if such homeopathy faculty recommend that they be issued?

Answer: I have no reason to suppose there would be.

Question: I would like to ask the President one other question. In your opinion, would it or would it not conduce to the best interests of the University if this question should be settled by establishing a homeopathic branch of the University of Michigan outside of Ann Arbor?

Answer: Yes, sir, that is my opinion.

#### DR. FORD, PROFESSOR OF ANATOMY

Question: How long have you been connected with the University?

Answer: Nineteen years.

Question: What, in your opinion, Prof. Ford, would be the result if two professors of homeopathy were installed in the Medical Department of the University?

Answer: I think it would prove injurious.

Question: Please state why you think so?

Answer: Because I think it would injure the Medical Department, which depends upon having the confidence of the medical profession.

Question: You may state any other reasons that occur to you why it would be injurious to the University.

Answer: I think that no school can survive if it teaches a principle that does not receive the confidence of the profession. We cannot alter public sentiment in that respect, whatever effort the faculty might make. I do not think we would be sustained by the profession for the reason they have no confidence in that system as a whole.

Question: Do you think that homeopathy could be taught in the Medical Department in harmony with what is now taught there?

Answer: There would necessarily be antagonistic views. I think the effect would be very much as though an antagonistic system of theology were introduced in a theological school. I think the good people, who are now in the habit of sustaining the school, would withdraw their patronage—would lack confidence in it.

Question: I would like to ask you, Prof. Ford, whether the regular practice and the homeopathic are not approaching each other?

Answer: I think they are. I think there are very few practicing that system who now confine them-

(3) At that time there were but two years of six months repeated each year. This is why the students went to another school the second year. To prevent this the University adopted the graded course and made it three years and some colleges four years.—Author.

selves to small doses. I think further that very few of them claim to always give medicine on homeopathic principles. My friend, Dr. Knapp (who was a member of this legislative committee—Author), said to me the other day that he does not always do so. I know other men who have stated the same thing to me. This is why I think the two systems are approaching each other. The system is changing, dying out.

Question: What is your opinion of the effect, if any, which would be produced upon the University at large?

Answer: I think the ultimate destruction of the Medical Department would be complete. It would be a scene of contention and strife and would be destroyed in order to get rid of the troublesome subject, however earnestly the profession might work to sustain it. I fear the ultimate result would be the destruction of the University.

Question: You speak of the ultimate destruction of the whole institution. In which class of professors do you think this trouble would originate?

Answer: I do not know. I think the inevitable result of two antagonistic systems would be as I expressed it before, lack of harmony. I never saw a medical college enter upon a quarrel that was not destroyed by it. I have been in two medical colleges that were completely destroyed by a quarrel.

Question: Do you know of any school anywhere where medicine is taught, where the two pathies have been taught?

Answer: I have no knowledge of any such institution ever existing. Of course, the matter of the introduction of homeopathy is not a new one, but has been the subject of a great deal of conversation with us all. I have been here a long time. There was an occasion a few years ago when in discussing this subject with members of the literary faculty talking it over informally, the question was asked—whether men in the regular profession, men of acknowledged ability and character, could be found to fill the various professorships after the introduction of homeopathy. Two members of the faculty were quite sanguine that such men could be found. Subsequently the men corresponded upon this very subject and both of them changed their opinions. Both were convinced that such men could not be found to fill the places under such circumstances and they still are of the same opinion.

#### DR. DOUGLAS, PROFESSOR OF CHEMISTRY

Question: How long, Doctor, have you been connected with the University?

Answer: Twenty-nine years. Since 1844.

Question: I wish, Doctor, to ask you regarding the success of the University from its foundation up to 1851, when the Organic Law was passed by which the people elected the Regents. What was its history?

Answer: From the first organization of the University up to the time the Medical Department was started, its success was very indifferent. Its friends were not satisfied with its condition. I was very unpopular because it was not a success. The University suffered a good deal from extraordinary legislation and the uncertainty of everything. Everything was in a chaotic condition. The condition of the finances was such that the professors had to go without their salaries in consequence.

Question: Since that time what has been the history of the University?

Answer: About the time of the organization of the Medical Department was the starting point of the success of the University and it has since been uninterruptedly on the upgrade.

Question: You were professor of chemistry in the

Literary Department previous to the establishment of the Medical Department?

Answer: Yes, sir.

Question: What was the influence on the University of the establishing of the Medical Department?

Answer: At the time of its establishment the number of students in the whole University was about sixty, I think. During its first year the Medical Department had ninety students. It surprised everybody. No one expected any such number. Its success gave an impetus to the whole University and from that time on it has been very successful.

Question: From your extensive knowledge of the affairs of the University, what, in your opinion, would be the effect of placing two professors of homeopathy in the Medical Department?

Answer: I can see no effect but damage to the entire institution. There have been reasons given here by other gentlemen and I think all who are connected with the medical profession know that no medical school can be sustained without the aid, sympathy and goodwill of the profession.

Question: If the Regents should establish a School of Homeopathy elsewhere, what would be the effect of such action on the University here?

Answer: As far as the University is concerned, I cannot see any evil that would result from it.

#### DR. ADAMS, PROFESSOR OF HISTORY IN THE UNIVERSITY

Question: How long have you been connected with the University?

Answer: Fifteen years, with the exception of one year, spent in Europe.

Question: Will you state, Professor, what, in your opinion, would be the result if two professors of homeopathy were installed in the Medical Department of the University?

Answer: I think it would be very injurious, if not destructive, to the Medical Department and for the following reasons:

It is understood that students coming here who intend to graduate and practice their profession do so in the expectation of being able to carry a certificate showing the work done here and being given credit for this work in any other school.

It is commonly believed, and with reason, that such certificates would not be accepted if homeopathy were taught in this University. The medical associations, both state and national, take the ground that they cannot accept diplomas from schools where homeopathy is taught. This being true, students would go to other schools for instruction.

#### REV. GEO. P. WILLIAMS, PROFESSOR OF PHYSICS IN THE UNIVERSITY OF MICHIGAN

Question: How long have you been connected with the University?

Answer: Thirty-two years.

Question: You teach in the Literary Department?

Answer: In all departments that require the study of physics, which includes all but the Law Department.

Question: What, in your opinion, would be the result if two chairs in homeopathy were established in the Medical Department of the University?

Answer: I think it would be very disastrous to the Department.

#### DR. BENJAMIN COCKER, PROFESSOR OF MORAL AND MENTAL PHILOSOPHY IN THE UNIVERSITY

Question: Dr. Cocker, in your opinion, what would be the result if two professors of homeopathy were installed in the Medical Department of the University?

Answer: My opinion is that it would be disastrous to the Medical Department of the University. My

general reasons are that the Medical Department has been built up entirely through the labors of a class of men who are recognized as scientific and experienced in the practice of medicine and has been almost entirely self-supporting and is supported, so far as students are concerned, exclusively, or nearly so, from the patronage of the scientific or experimental profession. If I may be permitted to add a word more I will say that the reputation which this school attained, especially during the time of the Civil War, added greatly to the prestige of the University. Some of the best army surgeons were graduates of this institution and some of our students have made a great reputation in Europe, operating in the presence of European surgeons, and that to destroy this reputation by changing the character of the school would be to blot out the best part of the record of the University. Personally I should not object to the appointment of these men, and will agree to it if it can be arranged so as not to hurt the school, but I have come to the conclusion that it cannot be done.

Question: Dr. Cocker, does the practice of medicine as taught by the Homeopathic School differ so materially from that taught by the Allopathic School that they could not be blended without destruction to one or the other?

Answer: I think they could not be blended without being disastrous. I have studied medicine myself and practiced it some. There are a good many members of the faculty who employ homeopathic physicians in their families, but who would deprecate or would regret the appointment on the ground that they believe that it would ruin the Medical Department which, to all of us, has been a source of pride.

#### DR. EDWARD OLNEY, PROFESSOR OF MATHEMATICS IN THE UNIVERSITY OF MICHIGAN

Question: Prof. Olney, how long have you been teaching in the University?

Answer: This is my eleventh year.

Question: What, in your opinion, would be the result if two professors of homeopathy were installed in the Medical Department?

Answer: I cannot say what would be the ultimate result, but the immediate effect would be to diminish the attendance very materially. I should be surprised if there were one-third as many as we now have.

Question: You may explain why you think so.

Answer: The chief reason is that inasmuch as most of the students read in the offices of the regular practitioner, and these practitioners have an aversion to homeopathy, would not advise their students to go to such an institution. Another reason is that in all medical schools many students take one course in one institution and the other course elsewhere. Therefore students from this school would not be accepted by other schools. Hence, they would not come here at all. Then, again, the diplomas from here would not be accepted in the different societies and all of our graduates would be excluded from such privileges. If you include in your question the effect upon the institution in general (You may do so), I would answer that by saying that it would cut down our finances by at least ten thousand dollars. This is a very safe estimate, because the interest on the part of the homeopathic profession would not increase the income to any extent. Therefore the University would run behind that amount each year beyond all available resources.

Question: Please state whether the University at large would be otherwise affected in any way by the introduction of homeopathy in the Medical Department?

Answer: That question is so broad that one can hardly give a definite answer. It is true that for

several years after the Medical Department was founded, the prestige of the University was obtained from that Department. Whether the University is now so strong as not to suffer from that loss in the Medical Department is a question hard to answer. I think, however, the University would suffer very materially from the crippling of the Medical Department. The public would be influenced by the number of students in attendance and a diminution from twelve hundred to eight or nine hundred would be a serious blow to the University.

A catalogue sent out with such figures would be a palpable thing that everybody could understand and in my judgment would be very detrimental.

Question: I would like to ask you, Professor, whether it is of any advantage to the University to have a medical department connected with it.

Answer: Yes, sir. I think it is a decided advantage in the filling out of the idea of a University in the public mind. I think any prominent department which can be added does very much to strengthen the whole University. The success of any department lifts up the Literary Department and holds it up.

Professor Olney made the following written statement at the conclusion of his testimony. "From my intimate acquaintance with the men who usually consult together, both in and out of the faculty concerning the well-being of the institution, I have no doubt that a settlement of this vexed question by the establishment of a Homeopathic School somewhere else would be hailed with great satisfaction by those whom we are accustomed to look upon as friends of the University.

"I have no doubt of this at all. I know that President Haven would have so estimated it. It is not because there is a feeling against homeopathy here, but any practical settlement of the question in that way would be hailed with the highest gratification, I am sure. In fact, I know it is so."

JUDGE THOS. H. COOLEY, PROFESSOR OF LAW IN THE UNIVERSITY OF MICHIGAN

Question: Judge Cooley, you may please state to this committee what, in your opinion, would be the result if two professors of homeopathy were installed in the Medical Department of the University of Michigan.

Answer: I think it would necessarily be injudicious, sir.

Question: Please state what your reasons are for thinking so.

Answer: My reasons are substantially the same as those given by Professor Olney. That there is no department of the University so dependent upon the good will of the profession as the Medical Department is upon the medical profession. The profession controls to a very large extent the attendance of students. Not wholly so, but certainly very largely so. I think the necessary tendency would be that what is called the regular profession would cease to a very considerable extent to give it its countenance and support and I cannot see for myself whence that deficiency is to be supplied. A few homeopathic students might come, but many come now.

Question: If you have no objection, will you please state whether you employ a homeopathic physician in your family?

Answer: Well, sir, until Dr. Sager's health failed I generally employed him. Since then, when I have had occasion to call in a physician for my children I have called in Dr. Backus, a homeopathic physician. I think I could name some other professors, but do not suppose it will be necessary.

Question: Is there anything else in this connection you would like to say, Judge?

Answer: I feel very great delicacy in saying any-

thing except in answer to specific questions. I will add, however, that my opinion is not based upon my own observations exclusively or upon conversation with what are called regular practitioners, but upon conversations with those who practice homeopathy as well, some of whom have expressed to me the opinion that to put homeopathic professors in here could only cause mischief without benefitting homeopathy.

You have inquired whether one department could be injured without effecting the rest. I should say unhesitatingly it cannot. The standing of the University, especially with educated men upon whom we very largely depend for our reputation as well as for our students, depends in no small degree upon its completeness as a University, and the possibilities and advantages which each department more or less gives to students in the other departments. And the standing of the Medical Department is such that every year they contribute to bring students to the Literary Department. Perhaps it would not be unjust to say that the Medical Department first acquired an established reputation and was known throughout the country, while the Literary Department was still comparatively unknown. That reputation has been of high value to the Literary Department and contributed very largely, I think, to build it up.

Question: Can you suggest any change that should be made in this legislation that would benefit the University?

Answer: I hardly feel it within my province to speak on this subject at all. I have no unfriendly feeling or prejudice towards the homeopathic school, as you can see from my not hesitating to employ one in my family, and if the homeopaths were in possession and by their ability and reputation, as teachers had succeeded in building up a school corresponding to the one now here, I should be opposed to any such action being taken on the part of others as would result in its substantial destruction. It has seemed to me that it is impossible to give aid to them by the state without injury to the school now established, except by giving it at some other point. To put these professors in here and sustain them here must necessarily, I think, result in a feeble school and no desire or effort of the present faculty could prevent that result.

Eventually if they are to be connected with a school corresponding to their reputation they would be obliged to abandon this ground. What I have said is based on the assumption that the professors now here remain and do what they can to prevent injury. (They did not remain, but all resigned when the bill of 1873 was passed.—Author).

The remainder of the nineteen witnesses agreed in substance with what has been given but some of them were teachers in the O. S. department and were therefore prejudiced and the others were so nearly identical in their testimony that it is not necessary in my opinion to take the time to quote them.

After such testimony this legislative committee reported adversely to such teaching in the Medical Department of the University but in spite of this report as well as the report from the Board of Regents to the same effect the Legislature ignored these reports and in the following month, April, 1873, passed the following: "The Board of Regents shall on or before July 15, 1873, appoint, install and thereafter maintain two

professors of homeopathy in the Department of Medicine and Surgery in the University of Michigan, to wit; one professor of theory and practice of medicine and one of Materia Medica, who shall be paid a like salary and be entitled to all the rights and privileges of the other professors in said department. All acts or parts of acts inconsistent with this law to be and are hereby repealed."

This is when all of the professors in the Old School sent in their resignations.

The Regents did not appoint these Homeopathic professors. Another thing that leads one to the conclusion that all was fixed before the committee was appointed was the fact that the House merely allowed the committee to make a report in favor of teaching homeopathy elsewhere in the state, but the testimony of the nineteen witnesses was not even read, much less studied by the Legislature. The report and testimony did not appear in the transactions and were never published and, as far as I know, the copy now before me is the only one ever written. Two years later, after much discussion, the Legislature on April 27, 1875, enacted the following law: "The Board of Regents are hereby authorized to establish a Homeopathic Medical College as a branch or department of the University which shall be located at Ann Arbor.

The Treasurer of the State of Michigan shall on the first day of January, 1876, pay out of the general fund to the order of the Board of Regents, the sum of \$6,000 and on the first day of January of each year thereafter, which money shall be used by said Regents exclusively for the benefit of said department."

On May 11, 1875, following the passage of this Act the Regents adopted a series of important resolutions as follows:

"The Homeopathic Medical College shall be established at Ann Arbor and two professors be appointed to be designated as professor of Materia Medica and Therapeutics and professor of Theory and Practice of medicine in the Homeopathic Medical College of the University of Michigan. The students entering this department to be subject to regulations then in force, or hereafter to be established for the government of the Medical Department. Said students to receive instruction in the existing Medical Department in all branches outside of the two chairs in the Homeopathic Department and shall be entitled to all the privileges accorded students of the Medical Department and all graduates from the Homeopathic Department be furnished with diplomas so designated. The time of study and graduation

to be the same as in the Medical Department."

It was made the duty of the President of the University to satisfy himself that the same conditions were duly enforced in both departments.

At this time the department was placed under the charge of the committee of the Medical Department. In a few years this department had its own separate committee.

On June 29, 1875, the Board elected Dr. Samuel A. Jones of Englewood, N. J. and Dr. John C. Morgan of Philadelphia. The first in Materia Medica and Therapeutics and the latter in Theory and Practice of Medicine.

At this point I wish to say a word as to why the Homeopathic School grew so rapidly in this country from 1856 to 1900. Previous to 1845 the practice of medicine was in a deplorable and appalling state. The enormous doses of powerful drugs given caused more illness than they cured. But the ruling powers in the profession were so blinded by prejudice and bigotry that they did not try to see the truth. The terrible persecution and the ostracism of those who professed homeopathy only tended to increase their followers. Their results were so far superior to heroic dosing of the Old School that the public soon lost confidence in the regular profession and took to homeopathy. This, coupled with the unyielding, Kaiser-like attitude of the regular profession accounts for the rapid growth of homeopathy during the latter half of the 19th century. But the dominant school has virtually adopted the Law of Similars and is teaching it in its best schools. Because the work of Pasteur, Koch and all those teaching the effects of vaccines, serums, toxins, antitoxins, etc., is but a confirmation of the Homeopathic Law of cure.

The Homeopathic Department occupied the second story of the most westerly of two houses (originally built for the residences of professors). These houses were located on the north side of the campus and faced North West Avenue. The Dental Department occupied the first story. I well remember how we students reached our rooms by an outside covered stairway.

During the first year, the session of 1875-6 Doctors Jones and Morgan lectured every day and often gave a second lecture in the evening.

This year the attendance was twenty-four and the students were of mature years, much older than now, averaging twenty-six years of age and they were a hard working body of men and women. Each carried all the required work in the Old School De-

partment as well as that of Doctors Jones and Morgan, and not a single condition was given any member. In all the work taken in the Old School Department the relations between the students were always of the most pleasant character. They worked side by side in perfect harmony. This has always been true. All the trouble came from a few bigoted teachers and medical men outside of the faculty. (I wish to add from personal experience of one year the fact that Doctors Jones and Morgan were the equals of any I have ever heard lecture. Each was certainly supreme in his special subject).

At the March, 1876 meeting of the Board of Regents a communication was received by the Board from the Homeopathic class and addressed to Doctors Jones and Morgan, expressing their complete satisfaction with the teaching of those professors.

Dr. Jones was an intellectual giant and in my judgment without a peer in this or any other country or in any age as a teacher of *Materia Medica*. His vivid portrayal of the pathogenesis of drugs, i. e., their disease producing qualities when administered to the healthy animal or man, was so eloquent and accurate as well as profound, that his lectures made a deep and lasting impression upon the students. His knowledge of the action of remedies in disease and his marvelous skill in choosing the *similimum*, made him the best prescriber of whom I have any knowledge. All that I know of the administration of drugs for the cure of the sick, I owe to his teaching and guidance. His enthusiasm created such an interest in the subject that all who heard him were led to a deeper study of the art of prescribing and those who sat under his teaching were marvelously successful in treating the sick. But his unfortunate temperament and his detestation and intolerance of those who did not agree with him or who were really ignorant made it impossible for him to work in harmony with others. His tongue and pen were so caustic that he was always hurting some one's feelings and because of this the Regents were forced to drop him.

Please excuse a digression. During the deanship of Dr. Jones there occurred some very interesting incidents. Remember we were in the upstairs rooms. One morning when Dr. Jones came to his 8 o'clock lecture he found a cow standing on his lecture platform placidly chewing her cud. It did not take the young men of the class very long to slide the cow down stairs.

The following day the campus walks were strewn with leaflets containing a poem written by Dr. Jones. I recall a few words only. Dr. Halermann's given name was Samuel and

Dr. Galen's name was John and this is the beginning of the poem, "Said Sam to John, since thou art so interested in our behalf we will keep this cow, but give you the calf." There were several verses in the poem and they caused great merriment among the students, but the Old School professors did not enjoy them so much.

Another episode that occurred was of a very different character. In those days the Medical Department had a very large attendance reaching as high as 525 students. Many of these came from such great distances that they could not, or at least did not, leave the city during the holiday season. As the Regents had positively forbidden any of the Old School professors to criticize homeopathy in their classes, the Dean, Dr. A. B. Palmer, each holiday season, gave a series of lectures against homeopathy. After two or three years of lectures the Old School students, who in those days were of more mature years, sent a request to Dean Jones that he reply to Dr. Palmer. He was granted the use of old University Hall and gave a series of three lectures, entitled "The Grounds of a Homeopath's Faith." These were so well written and so eloquently delivered that they made a very profound impression upon the minds of the Old School students. They were so unanswerable that Dr. Palmer never dared to reply and he never gave any more lectures against homeopathy. I have copies of these in my library.

Another episode: One evening several of us students of the Homeopathic Department called at the office of Dr. Woodruff in Ann Arbor. All at once we startled by a most terrific noise outside of his office. Quick as a flash, before the rest of us realized the real cause the uproar, Dr. Woodruff seized a basin and told us all to sit still. He started out of the door and as he did so ran his finger down his throat and at once began to vomit. The Old School students saw the point and sneaked off like whipped curs. Their very presence made him sick. Dr. Woodruff was not again disturbed.

Let us now resume the history of the College.

In June, 1876, the Executive Committee of the Board were authorized to consult with Doctors Jones and Morgan relative to the appointment of two lecturers for that department and given power to act.

In July of that year this committee appointed Dr. F. A. Rockwith of Saginaw, lecturer of *Obstetrics and Therapeutics*. Dr. Rockwith was a polished gentleman (French) and a scholar, and Dr. J. C. Gilchrist of Detroit, lecturer on *Surgical Ther-*

peutics. These appointments were confirmed by the Board on Oct. 17, 1876.

The attendance for the second year of the school, 1876-77 was fifty-one. More than double the first year's class (13 graduates). At the beginning of the third year of this school the homeopathic faculty was given one-fifth of the space in the hospital, to be used for their patients, but they were not given separate internes and nurses, therefore did but little work in the hospital. During the summer of 1877 Dr. Morgan resigned and in September, 1877, Dr. J. W. Hawkes of Chicago, was appointed in his place. After looking over the ground Dr. Hawkes resigned. He had given but a few lectures. Dr. Chas. Gatchell of Milwaukee was appointed in his place. Dr. Gatchell held his position for nearly two years. Resigning in March, 1880 and Dr. T. P. Wilson of Cincinnati was put in his place. Dr. Gilchrist lectured for two years, resigning in June, 1878. In June, 1878, Dr. E. C. Franklin, of St. Louis, Mo., was elected to the chair of Surgery and was made Dean of the Department. He held these positions for five years, resigning in 1883. Dr. Wilson was made dean in 1883. He resigned from the College on account of ill health in 1886. He was a very scholarly man and a perfect gentleman and fine lecturer. In June, 1883, the chair of Obstetrics and Diseases of Women and Children was created in the Homeopathic Department and in July, 1883, Dr. A. C. Cowperthwaite was appointed as its first professor, but did not accept the place. In August, 1884, Dr. Cowperthwaite was elected professor of Materia Medica and Pharmaeology and Clinical Medicine at a salary of \$1,600 for part time. Dr. H. C. Allen was appointed lecturer on Materia Medica in September, 1880. Dr. Jones resigned in July 18, 1878. Dr. Jones was so eccentric that he could find no one to work in harmony with him. Dr. Henry S. Obetz was appointed professor of Surgery in Homeopathic in 1883, and Dr. Newton Baldwin first lecturer in Obstetrics and Diseases of Women and Children at the same meeting. In June, 1885, Dr. H. K. Arndt of Grand Rapids, was appointed professor of Materia Medica and Dr. Jas. C. Wood professor of Obstetrics and Diseases of Women and children at the same meeting. Dr. Arndt resigned in July, 1889, and Dr. Wood resigned in 1893. Dr. D. F. McGuire was appointed to the chair of Diseases of Eye and Ear in 1885 and resigned in 1887. At the same meeting Dr. Sterling was elected professor of Diseases of Eye and Ear. Dr. Sterling resigned in 1889 and Dr. D. A. McLachlan was put in his place. In

1889 Dr. Chas. Gatchell was appointed professor of Theology and Practice and Dr. Chas. Mack was appointed professor of Materia Medica and Therapeutics. Dr. Gatchell resigned in 1893. Dr. M. P. Hunt was appointed professor of Obstetrics and Gynecology in 1893. Dr. E. R. Eggleston was appointed professor of Theory and Practice at the same meeting.

In 1894 culminated the long and bitter personal quarrel between Dr. Obetz (Dean) on the one hand, and the four other members of the faculty on the other. A very vigorously worded letter was written to the Board of Regents asking the Board to remove Dr. Obetz. This was signed by Doctors Mack, McLachlan, Hunt and Eggleston.

At the same meeting of the Board of Regents on October 24, 1894, a copy of the resolution passed by the American Institute in June, 1894, was presented to the Regents. In the Transactions of the Board of Regents, Vol. 91-96, on pages 368-371 will be found a very elaborate and a very fair-minded reply by the Board. This report is addressed to Dr. Pemberton Dudley, President of the American Institute.

Both the letter from the faculty and the Board of Regents and the reply of the Regents to the American Institute of Homeopathy enter fully into the details of the so-called Obetz "scheme," and both showed a logical grasp of the situation.

The one from the faculty is so obviously personal as to be robbed of any great value but the one from the Board of Regents to the Institute is a candid, fair-minded, and logical statement of the whole situation. Dr. Obetz refused to resign at the behest of the four members of the faculty above named, but after he had been sustained by the Board of Regents he voluntarily resigned in November, 1894.

At the same meeting the Board called for the registration of all the members of the homeopathic faculty to take effect in October, 1895. These resignations were duly forthcoming and were accepted at the Board meeting in January, 1895. This ended the terribly unfortunate trouble. Unfortunate from every standpoint. It injured the University and the Homeopathic College and the cause of Homeopathy.

The chief cause of the troubles during the administrations of Deans Jones, Franklin, Wilson and Obetz came from within the faculty. These quarrels were of such a personal character and were prompted by such vindictive and selfish motives that they are better forgotten than kept alive by repetition.

These internal quarrels cut the attendance to almost nil; there being only one graduate in June, 1895, viz: Dr. Atterbury of Litchfield, Michigan. This cut surely was not due to incompetence of the Deans or members of the faculty. Each of the Deans was a man abundantly able to fulfill the duties of the office. The first and last of the five (Doctors Jones and Hinsdale), especially being men of fine education and great executive ability.

As already stated, during the last year or two of Dr. Obetz Deanship his colleagues on the faculty tried to undermine him and put one of their number in his place.

In self-defense Dr. Obetz offered a solution of the trouble by presenting a scheme for amalgamating the two medical departments. This matter was referred to and considered by the American Institute of Homeopathy at its meeting in Denver in June, 1894.

The Institute appointed a committee of which the writer was a member, to whom was referred all the evidence in the case. This committee reported against the amalgamation and the Institute adopted their report. The letters of the Regents and the four members of the faculty opposed to Dr. Obetz have already been mentioned.

Briefly outlined the Obetz plan was this:

During the session of 1893-94 Dr. Obetz proposed a tentative plan to amalgamate the medical schools. The following is the wording of the resolution adopted by the Board of Regents: That one school of medicine be established in which both faculties were to be retained. Each student was to register as a student of medicine and surgery, receive instruction from both faculties and graduate as a doctor of medicine from the University of Michigan.

This plan to be adopted only in the event of its concurrent acceptance by both faculties.

This plan was objected to by all the other members of the Homeopathic faculty and by a majority of the profession in the state. This matter led to such bitter contention that by the advice of the Board, Dr. Obetz offered his resignation; he having first been vindicated by the Board against the charges of the other members of the faculty in November, 1894. The Board at the same time called for the resignation of all the other professors on the faculty to take effect Oct. 1, 1895.

After this long continued turmoil and annoyance the Board came to the conclusion that the only solution lay in a complete reorganization of the college.

All the resignations were duly accepted

and a complete reorganization was effected.

It was the professional opposition to the school as conducted together with personal and local causes that stimulated the Legislature to enact the Law of 1895, which in effect directed the Regents to remove the college to Detroit. How completely the Board had revised its policies of 1878 is shown by the vigor with which it resisted removal.

The Supreme Court decided the law to be constitutional but the Regents did not obey the law. Those in favor of removal then asked for a mandamus to compel the Board to obey the law. Upon this point the court ruled that inasmuch as the Board had full control of all matters appertaining to the government of the University, they might obey the law or not as they chose. In view of its great importance not only to the Homeopathic Medical School but to the University for the future I deem it wise to give in full the masterly historical document reported by the combined committee of the Law and Homeopathic Departments of the Board of Regents meeting of January, 1897, giving the reasons why the Board decided not to obey the mandate of the Legislature regarding the removal of the Department of Detroit.

#### DECEMBER MEETING, 1896

Regent Cook presented and read a communication from Dr. D. A. MacLachlan and others in relation to the removal of the Homeopathic Medical College to Detroit. On motion the matter was referred to the Law Committee, and the Homeopathic Committee for consideration.

#### JANUARY MEETING, 1897

On motion of Regent Butterfield, the Board went into executive session.

Regent Butterfield, chairman of the special committee appointed at the last meeting, to whom was referred for consideration the communication of Dr. D. A. MacLachlan and others in relation to the removal of the Homeopathic Medical College to Detroit, submitted the following report:

#### REPORT

At a meeting of the Board of Regents, held December 16, 1896, there was presented to it the following petition:

"To the Honorable Board of Regents of the University of Michigan:

Whereas, the Supreme Court has established the validity of the Act to remove the Homeopathic Medical College to the City of Detroit (Senate Bill No. 455 of the Public Acts of the State of Michigan, 1895), and whereas, the profession is favorable to the said removal as therein provided and is practically unanimous in this desire as shown by the accompanying resolutions addressed to the President of the State Society, and signed by the leading Homeopathic physicians of the State:

Therefore, we, the Board of Control of the Homeopathic Medical Society of the State of Michigan, do hereby urgently request your Honorable

Board to take such action at your next meeting, as in your wisdom seems best, and report the same to us at an early date."

Attached to the above were several documents similar in character, signed by seventy persons and addressed to the President of that Association, a former member of the faculty of the Homeopathic College. In these documents the subscribers urged the Board of Regents to remove the college and pledged themselves to use their personal influence to accomplish the result.

The method by which this personal influence is to be utilized is apparent from a circular circulated through the mail, and which is as follows:

"Dear Doctor—Four years ago an attempt was made to 'amalgamate' the Allopathic and Homeopathic departments of the University, that resulted in very nearly wrecking our College, and two years ago a bill was introduced at Lansing to abolish the College. Thereafter, at the request of the Homeopathic profession, the legislature enacted, 'That the Board of Regents of the University of Michigan are hereby authorized and directed To ESTABLISH A HOMEOPATHIC MEDICAL COLLEGE as a branch or department of said University, which shall be LOCATED IN THE CITY OF DETROIT.' It also directed the Regents to discontinue the chairs at Ann Arbor, and transfer them to Detroit, appropriating \$25,000 for building and equipment, the profession agreeing to provide a site, and the trustees offering the use of Grace Hospital.

"In due time the bill was declared constitutional, the site was tendered the Regents, and they were urged to comply with the law. They refused. Homeopaths asked for a mandamus to compel them, and the Supreme Court ruled that the Regents might obey the law or not, as they chose. The College is still in Ann Arbor, with a reported total of 42 students.

"The Legislature convenes January 1st, and Homeopaths must be up and doing, if they finally secure what they undertook two years ago, viz: to rectify the fatal error made 20 years ago in locating the College at Ann Arbor. While they are about it they should go further and place it beyond the power of the Regents to hamper or suppress the College. As is well known, a 'rider' upon the University appropriation bill is the only and a certain means to enforce compliance with the law, and to secure the wish of the Legislature and the profession. Two years ago the legislators said: 'Whatever Homeopaths agree upon, they shall have,' and they were true to their word. The profession were a practical unit in asking for the removal bill and the Legislature equally a unit in granting it. The situation is the same now. If every Homeopathic physician will give prompt and affirmative answers to the questions on the enclosed postal card, the work of seeing that the removal bill is complied with is as good as done.

"The members of the profession in eight of the chief cities of Michigan have already pledged themselves to this end, only one having declined the request to sign. Taking this as an indication of the sentiment throughout the State, a unanimity greater even than two years ago seems likely to prevail. The request is again made to each and all members of the State profession, and it is hoped that not one will fail to respond cordially and at once. If so, a new era will dawn upon Homeopathy in Michigan.

Fraternally and truly yours,  
D. A. MacLachlan,  
President State Society.

"P. S.—It is thought best to have a joint committee, comprising the Board of Control of the State Society, and one for the whole profession. \* \* \* If names suggested on the enclosed postal don't suit, erase and insert the names you wish."

The committee appointed by the Regents to consider the question involved in the above documents would respectfully report as follows:

From the best information at hand, we believe there are in the State of Michigan about five hundred Homeopathic physicians. Under the circumstances your committee can scarcely be expected to accept a petition signed by seventy persons as evidence of the unanimity of the entire profession of the State. But whether the petition represents a majority or a minority, it demands and is entitled to receive a fair and frank answer, and, in discussing the question, we shall consider not only the statements in the petition, but those in the circular accompanying the same.

1. The first statement in the circular is that four years ago an attempt was made to "amalgamate" the Allopathic and Homeopathic departments of the University, and that it resulted in nearly wrecking the Homeopathic College. The facts are as follows:

About the time mentioned the then Dean of the Homeopathic Department suggested to the Board a plan by which there should be one Medical School in the University to be known as the Medical School of the University of Michigan. That in that school both schools should be represented by professors as to the chairs where the teachings were diverse. That all students should be permitted or obliged to hear both sides, be graduated as students of the Medical College of the University of Michigan and be left perfectly free to adopt after their graduation the practice of either school as they preferred.

After consideration the Board decided that so radical a change should not be made without action of the Legislature, as the Homeopathic school was dependent upon special legislation, and thus, so far as the Board was concerned, the matter ended, and the gentleman who made the suggestion has since ceased to be a member of the faculty, not, however, for that reason. In the opinion of your committee, the personal rivalries and discussions which divided the Homeopathic Faculty at that time, and which paralyzed its efficiency, had a great deal more to do with the falling off in the attendance of the Homeopathic College than the discussion of this resolution.

2. A second statement is that two years ago a bill was introduced at Lansing to abolish the Homeopathic College. Your committee have no present means of verifying this statement, but they are certain that no such action was ever taken or approved by this Board. Nor had the Board any information on the subject, nor is it in any way responsible for it.

3. The statement is made that the Board refused to comply with the law. At the last session of the Legislature of this State an Act, No 257, Public Acts 1895, was passed, directing this Board to remove the Homeopathic College to Detroit on condition that prior to such removal a suitable site for the location of the buildings of such department should be donated to the State in fee simple, and on the further condition that an arrangement be made with Grace Hospital for the use of the same on such terms as to the Regents shall seem appropriate, without expense to the State. As the Board was advised by its counsel, and as was apparent from the Act itself, it was not only the duty of the Board, but it had no right, to take a single

step until the conditions were complied with, and it would not do this without being in danger of a claim being made that the conditions had been waived. That these conditions were exceedingly important is apparent, and that by the force of the Act itself the duty was laid upon the Board of not removing the department until they were complied with is also apparent, and yet these conditions have not been complied with, nor has either of them. No site has been procured or offered to the Board of Regents, nor have the Board had any assurance that any fund exists anywhere with which such site could be purchased. No arrangement has been made or suggested, or offered to be made, whereby the use of Grace Hospital, free, for a Homeopathic College could be secured. It has been well known that for many years Grace Hospital has run behind in its expenses, and in order that the Board might be safe, and the people of the State might be safe, in incurring the expense incident to the removal of the Homeopathic Medical School to Detroit, some guaranty should be given that the hospital would be sustained in the future without expense to the people of the State. Not only has this not been done, but, so far as your committee are advised, no action whatever has been taken to secure that end. Suggestions and applications have been indeed made to this Board, but they have been in the nature of requests to do something, or permit something to be done, different from what is required by the conditions of the Act, and the doing of which might have placed the Board in the position of assuming the burdens without receiving the benefits contemplated by the Act.

To have removed the College without the fulfilment of these conditions would have been to disobey a law of the Legislature of this State and to betray a trust imposed by that body upon this Board. From the passage of that law to the present time, there has not been a moment when the Board could have complied with the wishes of the gentlemen who signed that petition without betraying that trust and violating that law, and the petition in question is in substance a request that the Board do both. Shortly before the case referred to in the circular was brought, an application was made to the Board for the making of some arrangement so that at the least expense the question involved in the Act could be passed upon by the Supreme Court of this State and settled. It was admitted that the Act had not been complied with, but it was claimed that it was a hardship upon the friends of the movement that they should be required to go to the expense of procuring a site and to the trouble of making the arrangement with Grace Hospital until that question should be decided. And they asked that as a matter of courtesy the Board would give to them an opportunity to test the law. The Board were advised that if they should pass a resolution refusing to consider any offer made by the friends of the movement, a technical ground would be laid for an application to the Supreme Court. The only offer made was a statement by the attorney of those favoring the movement that they had secured an option on a lot in Detroit. It was scarcely claimed that this was in compliance with the law, and yet for the purpose of enabling the question to be raised and as an act of courtesy to them, the Board passed the resolution indicated. This is the only attempt at the tender of the site made to this Board, and since the decision of the Supreme Court no communication whatever has been received by the Board upon the subject from those favoring the movement, except the petition in question.

It is true there are now 42 members of the Homeopathic School. It is also true that the average attendance during the past five years, prior to the present college year, in that school has been only 41; and that a little over one year ago the present Faculty took the school, without practically any attendance, and by their industry, and their ability, and by united action they have already brought it to its present condition in the face of the opposition of a number of Homeopathic practitioners in this State, who seem not so anxious that the principles of medicine which they claim are the true ones, should be taught as that they should be taught in a certain place.

The circular, however, outlines a scheme of action by which the Board of Regents of this University are to be deprived of the discretionary powers which the people of this State have vested in them by the organic law of the State—by presenting to them the hard alternative of the abandonment of those rights, or the starvation of the University. It becomes, therefore, not only proper that unjustifiable attacks upon the past action of the Board should be repelled, but that the question should be frankly and fully considered as to what should be done for the future. In order to fully understand this question it is necessary to consider the position of the Homeopathic Medical College in the University at the present time. It has always been admitted that except as to a very limited number of subjects the teachings of the students of the Homeopathic College and of the College of Medicine and Surgery are the same. All the Homeopathic profession has ever asked until lately is that instruction in those few subjects should be separate. For the first two years of the medical course in the University, the students of both colleges take the same course, listen to the same lectures, and work in the same laboratories. In this way a very large amount of expense has been annually saved to the State. Apparatus, laboratories, libraries, and museums have been used in common, which in case of a removal to Detroit it will be necessary to duplicate. This has for many years met with general approval. Lately, however, there has been a constant cry from a part of the Homeopathic profession in this State for the institution of a Homeopathic College with a full four years' course, separate in equipment and in all the teaching chairs. The Board has hitherto not yielded to this demand, first, because in their judgment there was no reason why the State should be put to the greater expense necessary to the change, because it did not believe that the efficiency of the College would thereby be increased, and second, because it was impossible for financial reasons, to accede to it. Medical education under the most careful, conservative management, is always very expensive, changes are continually being made in expensive apparatus, and in the construction and equipment of hospitals; and the working force of the college itself is more difficult to supply and at a greater expense than in almost any other branch. It is felt that it is an education that deals with life and death and that nothing which really tends to its efficiency can be regarded as unnecessary. With the limited means at its command the Board has never been able to meet many of the demands of the medical faculties which it felt were reasonable. It is now proposed in addition to what has hitherto been demanded to remove this whole school to Detroit, and, for practically building up a new medical college, an allowance has been made of \$25,000. In the judgment of your committee \$25,000 is not enough for a building for from 50 to 100 students if the lecture

rooms, laboratories, and offices are all to be included in it. In our opinion such a building would cost at least twice that amount after the site was given to us. The cost of equipping the laboratories after the buildings are provided would probably be from \$4,000 to \$5,000 apiece. The following laboratories will be needed: 1. Chemical.

2. Electro-therapeutical. 3. Biological. 4. Histological. 5. Physiological. 6. Anatomical. 7. Pathological, including Hygenic and Bacteriological. It is claimed that men can be found in so large a city as Detroit who will act as professors in such a school free of charge and that the expense would not thereby be increased. There are many branches, such as chemistry, biology, etc., in which the instructors must give their whole time to the work and cannot be medical practitioners at all. These must all be paid wherever the college is. In the present state of medical education specialists are demanded for the several chairs, and these are to be procured only by selection from a wide field. We do not believe that men of that class will be found who are willing for any length of time to fill the chairs, without a salary. The expense of this Board has been that while volunteers might be secured for advertising purposes to take appointments temporarily, their continuance was only secured by the payment of the usual salary.

It is to be considered that in the removal of the Homeopathic School to Detroit, the Regents are expected to embark on a serious enterprise and one which might have to the University at large very serious consequences. By the Act known as the one-sixth mill bill from which the University derives its revenues from the State, it is provided that the several departments shall be maintained as they then existed. If therefore, this department should be once removed to Detroit, those interested in that special school might and probably would insist that the same facilities for education by way of teachers, libraries, and laboratories as are now afforded at Ann Arbor to their school should be furnished at Detroit. And to accomplish this either the State must each year add more than \$25,000 to the income of the University in addition to the large expense of the installation of the college, or else the other departments of the University must be weakened and the efficiency of the University as a whole sacrificed to this one school. If the people of the State desire a separate school of Homeopathy at Detroit, they should at least understand in advance the magnitude of the tasks they are undertaking and they should not ask this Board to accomplish impossibilities. In view of the wide differences of opinion which exists between the promoters of this enterprise and this Board as to that expense, we would suggest that in case such school be established, it be established under a separate board so that no claim can be made that the school is not treated fairly in comparison with other branches of the University, and the state may be able to ascertain the actual cost of such an institution. It will then appear whether this Board is correct or not. So far as the Homeopathic College itself is concerned, we believe that, like every other department of the University, it is stronger and more prosperous because it is a part of the University, not simply in name, but in fact, and that students and teachers are drawn to it, and retained in it, because of the University life in which they may thereby participate. There are numerous and important incidental advantages arising from the presence of other departments of the University, which would be almost wholly lacking in the new school. There are many sci-

tific lectures given here during the year which are helpful to the students which would not be given there, and the stimulus and helpfulness of life in the atmosphere of the University would be missing. There would be simply the narrow, special, and technical work by the school itself to furnish training for the students.

Your committee has thus far considered mainly the mere question of dollars and cents. Behind all these and above all these is the more important question of its effect upon the University. Long ago the people of this State abandoned the idea of a University with separate branches in its different cities, and adopted the policy of centering all its departments in its present location. There, as we have already said, where each department has added to the development and growth of all the rest, it has grown to its present position of eminence among the universities of the world. If it is proper, to satisfy a few of the members of one of the great professions, to remove one of its departments to Detroit, it is, on the request of other citizens of the State, proper to remove other departments to other cities, and, once commenced, there is no visible opportunity for pausing in the process of disintegration. It would be the beginning of the end. In the opinion of your committee, to grant the prayer of the petitioners would be not only a most flagrant breach of the duty laid upon us by the Legislature of the State, not only impossible with any funds within the control of this Board, and not only unadvisable for the real interest of the school itself, but dangerous as the first step in a policy which, once entered upon, could not easily be abandoned, and which would ultimately lead to the destruction of the University.

In view of these considerations, as well as many others that might be urged, your committee recommend that the prayer of the petition be denied.

ROGER W. BUTTERFIELD,  
LEVI L. BARBOUR,  
P. N. COOK,  
FRANK W. FLETCHER,  
HENRY S. DEAN.

On motion of Regent Dean, the report was adopted, and 1,000 copies were ordered printed for distribution by the following vote:

Ayes—Regents Barbour, Cocker, Cook, Dean, Kiefer, Fletcher, and Butterfield.  
Nays—None.

For the first year of the reorganization 1895-96, there were four members of the faculty, Dr. W. B. Hinsdale of Cleveland, Ohio. Dean and Professor of Theory and Practice and clinical medicine; Dr. Royal Copeland of Bay City, Mich., Professor of Ophthalmology and Otology and Science of the faculty. He was also given the chair of Pedalogy but never gave any lectures on the subject. Dr. Oscar LeSuer of Detroit as professor of Surgery and Dr. Parmalee of Toledo, Ohio, as acting professor of Obstetrics and gynecology. Dr. W. A. Dewey was made professor of Materia Medica in June, 1896. In the fall of 1897 Dr. C. B. Kinyon of Rock Island, Ill., was made professor of Obstetrics and Diseases of women in place of Dr. Parmalee. This filled the five chairs and while other teachers have since been added, they all come under these five heads.

Upon the resignation of Dr. LeSuer (in 1901), Dr. Dean T. Smith of Jackson, Mich. was elected to the chair of Surgery.

No body of men ever worked harder or more harmoniously than did the Homeopathic faculty from 1895 to date.

Each member bent his whole energy in helping to build up the school. During my term of twenty-one years I deliberately tried to persuade several of my private patients to go to the Homeopathic Hospital in order to give the class the clinical material, and thereby attract students. During the years 1898 to 1918 I sent to the hospital on an average each year over fifty well-to-do patients, thereby losing some three to five thousand dollars a year for the sake of the school. The Dean was always repeating, "You cannot have a Medical College without students," and he and all the rest of the faculty acted upon that theory.

But all to no purpose for the inevitable tendency of the times is to have but one School of medicine wherein all the facts of Medical Science are taught and the best colleges now acknowledge this fact and in a short time all will follow the lead of the University of Michigan and cover the whole field of Medical Science.

In all the entire session of the legislative session of 1922 and 1923 the above mentioned Homeopathic Doctors were very active at Lansing and throughout the State and Nation also, and brought all the influence they could command upon both the Senate and the House, and used every means known to politicians to defeat the action of the Board of Regents. All to no purpose as the Legislature took no action except to defeat every move made by the Homeopaths.

This is as it should be for why should the tax burdened people be called upon to support a separate Medical School when the inevitable tendency, on all sides, is to have but one class of Medical Colleges and these to teach all the facts known to Science for the cure of sickness and the relief of mankind.

As to the ultimate success of the Amalgamated School at the University of Michigan one cannot form any definite idea or express any opinion, for there are but two men that teach Homeopathy. One teaching Theory and Practice and the other *Materia Medica*.

These are both young men with their reputation to make and as yet are only assistant professors.

This Commencement ('23) there were eighteen graduates from the Medical School that asked for a certificate in Homeopathic Medicine in addition to the regular medical

diploma. All graduates are given the same form of diploma and any one asking for the Homeopathic certificate is given one. (Of course, provided he has taken the lectures in that branch of medicine in addition to the regular medical work.) As a matter of fact, these eighteen certificates are no criterion to go by in forming any opinion as to the faith of the applicant in the efficiency of the Homeopathic Law of cure.

At least some of these merely ask for it so that they may be able to say to those of their patrons who want Homeopathic medicine that they are prepared to give it as they are a graduate in homeopathic medicine.

Allow me to make one observation. Only time can tell how this will succeed. And only competent teachers can enable any one to settle the real value of the amalgamated school.

My personal opinion is that if a student wants to practice pure Homeopathy he had better take the full course at the Hahnemann Medical College at Philadelphia.

This is a class "A" College and a good one too, in every particular, and is the equal of any Medical School in the United States.

#### PITUITRIN AS A REMEDY FOR RENAL GLYCOSURIA\*

ROBERT C. MOEHLIG, M. D.,  
and  
EUGENE A. OSIUS, M. D.

That the pituitary gland exerts an influence on carbohydrate metabolism has been known for some time. It is generally believed that in hyperfunctioning states of the pituitary a lessened tolerance for carbohydrates exists, whereas in hypofunctioning states a heightened tolerance is present. The injection of pituitrin produces a slight temporary rise of blood sugar and it has recently been shown that pituitrin modifies the action of insulin. One of us (R. C. M.) has advanced the idea that the secretion of the posterior pituitary gland has a selective action on mesenchymal tissues. From this, among other tissues, are derived the fat cells, the collecting kidney tubules and the capsule of Bowman. If the posterior lobe secretion has a selective action on the fat cells, as seems to be the case clinically, then the close relationship it would have to carbohydrate metabolism is a logical sequence of thought. Be that as it may, the beneficial effect of pituitrin in diabetes insipidus is well established. The recent data seems to point to a specific effect on the renal cells in overcoming the enormous urinary output. From the above

\*From the Department of Internal Medicine.—Harper Hospital, Detroit, Mich.

ideas that pituitrin is concerned with carbohydrate metabolism and is stimulating to the renal cells, it was deemed advisable to try the effect of injections of pituitrin in a case of renal glycosuria. The patient, a physician, gave good co-operation and following is a case report.

#### CASE REPORT

The patient is a young physician of 29 years, who first complained of slight polyuria in February, 1923, following a party at which he had eaten quite extensively. The chief complaint was associated the following morning with some vomiting, slight nausea and general gastro-intestinal disturbances, but without any severe pain which could be construed in any sense as an acute surgical condition of the abdomen. He tested his urine for sugar and found that it precipitated Benedict's solution very markedly and although a quantitative test was not done, he estimated that there was over 2 per cent of sugar in the urine. This lasted for two to three days, was never present except in the evening following the large meal of the day. This was unassociated with increased thirst, increased appetite or nocturia. He was not easily fatigued and had no abnormal condition present which might lead one to suspect diabetes mellitus. The following morning fasting blood sugar was .085 per cent, the urine was free of sugar. For the next seven to ten days the urine was repeatedly negative on single specimens which were collected in the morning, afternoon and again at night. Urine collecting during sleep was not tested. His weight at this time was 178 pounds. He continued thus for a year, having absolutely no symptoms such as polyuria, polyphagia or polydipsia and was not easily fatigued. He was to all intents and purposes a normal, healthy adult individual, able to do his work with his usual ease.

In January, 1924, having no complaints whatsoever, he accidentally tested his urine and noted that it gave a reddish precipitate with Benedict's solution. This was a specimen taken after the evening meal. For several days thereafter there was sugar present in the urine following the evening meal, but at no other time. This was estimated as being over 2 per cent in amount. The following morning his fasting blood sugar was .095 per cent. Thereupon a sugar tolerance test was done. Fasting specimen showed .089 per cent sugar present in the blood. He was given 100 gm. of glucose. One-half hour after blood sugar was .16 per cent, 1 hour, .103 per cent, 2 hours, .099 per cent, 3 hours, .097 per cent. During this test a considerable amount of sugar appeared in the urine. At no time has there been any albumin, diacetic acid or acetone nor abnormal constituents of the urine found. Following this he adhered to a diet and it was noted that as long as he remained on a diet which contained approximately less than 100 gm. of carbohydrate for the 24 hours his urine remained sugar free. Potatoes, rice, corn, sugar, syrup and fruits caused a rapid production of sugar in the urine. Rye bread, toast, pumpkin pie and custard pie seemed to affect this not at all. His diet now consisted of the following:

**Breakfast**—Average portion of rolled oats with butter but no sugar or cream. Coffee with cream and half slice of toast.

**Lunch**—One serving of cabbage, moderate amount of meat or eggs, serving of tomatoes or spinach, probably peas, some rye bread, a glass of milk and occasionally some jello.

**Supper**—Steak, one half slice of bread, salad, coffee, one half banana, but no potatoes.

**Total:** Carbo., 78; P., 60; F., 54.

If he ate potatoes or occasionally too much bread

there was a faint trace of sugar in the urine. He remained upon this diet, staying sugar free, but in three and a half months lost fifteen pounds in weight and became easily fatigued. There was no polyuria, polyphagia or polydipsia, no craving for sugar or candy and, in fact, developed a dislike for the same.

**Family history:** Entirely negative for diabetes or any of the familial diseases.

**Past History:** Mumps at the age of 24, measles at 18, chicken-pox at 12, whooping-cough at 8—with-out complications. Influenza in 1921, when he was sick for eight weeks. This was not associated with pneumonia. Sinusitis of the antra every winter for the last two or three years, lasting two to three weeks, occasionally associated with generalized malaise and discomfort. At intervals there has been non-surgical drainage of these sinuses. Pneumonia in 1910. Patient has occasional attacks of mild arthritis involving wrists and fingers with no signs or symptoms except localized pain upon motion. These are easily relieved by salicylates. Frequent attacks of tonsillitis during 1916 and 1917. Tonsillectomy, 1918, without any recurrences since. Herniotomies, 1917 and 1922. The latter was accompanied by hemorrhoidectomy. Bilateral otitis media in the winter of 1918, when he was in bed for two weeks. There was impairment of hearing for one year, which has returned to normal at the present time. Otitis media several times every winter for two or three years at the age of 10.

Cardio-respiratory, gastro-intestinal and genito-urinary systems are entirely negative. There have never been any gastro-intestinal disturbances which might be construed as a mild pancreatitis. Regular bowel movements.

#### PHYSICAL EXAMINATION

Patient is a well developed, well nourished, male adult of the long, slender diathesis, with long slender hands and fingers, tending to be of the unemotional type with somewhat heightened pitch of voice.

**Skin:** Large, hairy nevus 6 by 3 cm. in the region of the 12th thoracic vertebrae. Two incisional scars in the inguinal regions.

**Head:** Eyes normal, pupils equal, regular and react to light and distance. Fundus examination reveals a normal fundus.

**Nose:** Essentially normal.

**Throat:** Tonsils absent. Teeth in good condition with a few gold and amalgam fillings. Tongue is essentially normal. No other abnormalities noted anywhere in the oral cavity or posterior pharynx. There is no lymphadenopathy. Thyroid gland is palpable, soft, about half again the normal size, not fixed, not nodular. This is probably slightly larger than the normal for an adult male in Michigan. No exophthalmos, no tremor upon extension of the hands.

**Chest:** Pectoral tissues show slight increase of fat deposit. Musculature fair.

**Lungs:** Good resonance throughout. In the region of the hilus there is an occasional squeak or groan such as is found in chronic bronchitis and beginning asthmatic conditions. Otherwise breath sounds are clear and normal without any rales heard. No change in whispered or spoken voice.

**Abdomen:** Entirely negative.

**Genitalia:** Right testis is somewhat small and soft, this condition being present ever since herniotomy on the right, following which for a year there was infrequent pain in the right testis. It is believed that the ligature at that time, together with the manipulations at the operation, impaired the blood supply to this region. Other testis normal. No hernial impulses felt at present.

**Extremities and Reflexes:** Entirely normal except for a slight contracture of the third finger on the left hand due to a scar from an old burn.

Neurological Examination: Not done.  
Blood Pressure—130/90.

(Note:—Only the chief positive findings have been recorded in the physical examination.)

On May 22, 1924, he was given one half c.c. of surgical pituitrin subcutaneously. He noted some weakness, shakiness, pallor of the skin and moderate moisture and perspiration of the same. There was no dizziness or ocular disturbance, but for two or three hours patient had a slight headache. He has since been having daily injections of 1 c.c. of surgical pituitrin. Following this his diet was as follows:

Breakfast—Two fried eggs; potatoes, 2 to 3 tablespoonfuls; slice of toast, coffee with cream, but no sugar.

Lunch—An omelette, small amount of potatoes—2 tablespoonfuls, cream, pumpkin or cocoanut pie, glass of milk.

Supper—Soup with crackers, a small steak, 2 tablespoonfuls of potatoes, 2 slices of bread, butter, a salad, some sliced bananas, coffee.

C. 121, P., 65, F., 75.

During this time patient attended a banquet at which he ate liberally of cake and ice cream as well as protein and other carbohydrates. His urine has been entirely free of sugar with one exception. On the first of June he received 1 c.c. of surgical pituitrin at 10 o'clock in the morning. At 2 p. m., he ate a piece of cherry pie and urine at 4 p. m. "was loaded with sugar." Ate supper that evening and at 9:30 urine was entirely free of sugar. On June 10th, after having 1 c.c. of surgical pituitrin, he ate some cherry pie and showed a faint trace of sugar.

Within the three weeks the patient has been under treatment he has gained eight pounds in weight, feels immeasurably stronger and has been certainly on a more liberal diet.

For the last week patient has complained of considerable wheezing, especially in the morning, and raises a little sputum, but has had no other untoward symptoms.

On two occasions patient was given obstetrical pituitrin instead of surgical pituitrin, the former being one-sixth as strong as the latter, but there was no appearance of sugar following this. We are unable to explain appearance of sugar in urine following ingestion of cherry pie except that sugar content of pie was extremely high. The carbohydrate content of the diets have been estimated and are only approximate. We realize full well that the diet may have varied from day to day and the content of carbohydrate in the diet may have changed, but we do not believe to any appreciable degree.

Another case which responded in a like manner after one dose of pituitrin is being observed.

In reporting this case, we naturally cannot draw any conclusions. How long he must continue these injections and whether the beneficial results are lasting can be told, of course, only through a longer course of study. But the beneficial influence the injections of pituitrin have had on this case would seem to make it worthy of trial in other cases. We hope to report further studies on this and other cases of renal glycosuria. It is also to be hoped that others will report their results.

## PARALYSIS FOLLOWING DIPHTHERIA—REPORT OF A CASE\*

JOHN L. GARVEY, M. D.  
ANN ARBOR, MICHIGAN.

Paralysis following diphtheria, while one of the most common types of paralysis, may be of an extremely mild or equally severe type. Landouzy<sup>1</sup> goes so far as to say that the number of cases exceeds all other forms of paralysis combined. He thinks also that 10 to 20 per cent of diphtheria patients have some form of paralysis following diphtheria. No doubt the percentage would be higher than is ordinarily thought if all cases of diphtheria were com-

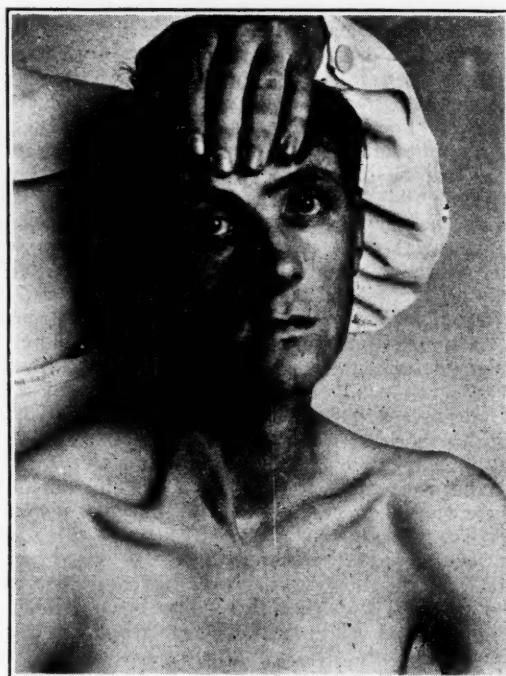


FIGURE 1.  
Paralysis of the left sternocleidomastoid muscle with the unparalyzed right side tending to rotate and incline the head.

pletely examined for generalized and local paralysis. Mixsell and Giddings<sup>2</sup> had ninety-nine cases of post-diphtheria paralysis in 4,259 cases of diphtheria. The cases of post-diphtheria paralysis entering the neurological clinic in the past three years number thirteen, all more or less late in the course of the disease and of the more severe types occurring in adults. None of the cases were seen during the clinical course of the diphtheria.

It is not my intention to report or discuss all of these cases, but to call attention to some of the more unusual observations in this group. The following case (on account of the extent of the paralysis and the involvement of such unusual parts) warrants recording in some detail.

\*From the Clinic for Neurology, University of Michigan School.

## CASE REPORT

A man, age 26, and a laborer by occupation, entered the University Hospital December 9, 1923, complaining of paralysis of the legs, arms, shoulders and neck, also difficulty in talking. The family and previous medical history was practically negative except one child had epileptiform attacks. His present illness apparently began October 15, 1923, at which time he had sore throat and a swelling of the left side of the face. This was diagnosed diphtheria and on October 17, two days later, he was given 10,000 units of antitoxin and on the three succeeding days 20,000 units of antitoxin daily. Two weeks following the onset of his illness he complained of blurring of near vision and some difficulty in talking. Three weeks later he began to have difficulty in swallowing. He said that fluids regurgitated through his nose. Five weeks after the diphtheria started he noticed numbness in the finger tips and feet with a gradual onset of weakness in the extremities. He had lost thirty pounds in weight. The examination of the patient at entrance was as follows:

He came into the examining room in a wheel chair. He appeared poorly nourished, but mentally he was normal. His speech was rather of the dysarthric, bulbar type. Facial expression was somewhat smoothed out. He held the head inclined to the right and somewhat upward. The region of the cheeks and temples appeared somewhat sunken. The pupils were somewhat irregular. They reacted to the light and in accommodation. The extraocular movements were normal except there was some limitation of right lateral movement of the eyeball and a few fine nystagmus movements. The jaw deviated slightly to the right on opening and he felt pin point plainer on the right side of the face than the left, the change coming in the mid line. Light touch was normal on both sides of the face. The corneal and supraorbital reflexes were normal on both sides. He had a left lower facial paralysis. The otologist reported a left mid ear deafness with some evidence of an old inflammatory process. The soft palate hung in the mid line and on phonation there was no movement. He had marked difficulty in swallowing. The X-ray showed the epiglottis to be paralyzed with no evidence of esophageal paralysis. There was also X-ray evidence of paralysis of the left leaf of the diaphragm. The left sternocleidomastoid muscle and the upper portion of the trapezius was completely paralyzed, the right was normal. He held his head slightly forward and on attempting to tip it back, when it reached a certain point, he was unable to hold it up. The tongue protruded to the left and there was considerable atrophy and fibrillary tremors of the left side of the tongue. The pulse rate was eighty beats per minute and pressure over the eyeball caused no slowing of the rate. The ocular fundi showed no gross lesion. There was some wasting of the muscles of the hand, especially the thenar eminence. The grip was weak. All movements of the upper extremities were weak and incomplete. The upper extremities were flaccid. The biceps jerks were absent and the triceps were markedly diminished. The legs were quite flaccid, the left more so than the right. The knee and Achilles jerks were absent and there was extreme weakness in all movements of the legs. The plantar reflex was absent. Sense of motion and position was absent in the toes. Vibratory sense was lost in the ankles and diminished in the wrists. There was no incontinence or retention of urine. He could not stand on account of marked weakness. The blood pressure was 112/70. The urine and blood examinations were negative. The heart, by electrocardiograph examination, showed an inversion in the T wave in leads one, two and three.

The opinion at this time was that he had marked myocardial changes. The spinal fluid showed six cells per cubic millimeter. The carbolic test was very heavy. Nonne-apelt one and two likewise was heavy. The sugar content of the spinal fluid was within normal limits. The Wassermann test on the blood and spinal fluid was negative. The mastic test was 0111222. The gold sol curve was 2330000. The patient was placed on 1/30 of a gram of strychnine three times a day and general massage. On Jan. 7, 1924, there was considerable improvement in the condition of his swallowing and voice. The paralysis of the left sternocleidomastoid muscle was much improved. There was practically no facial palsy. There was no change in the condition of the extremities. He complained of numbness and cold feeling up to the pelvis. Sensation in the distribution of the fifth cranial nerve was at this time normal. The grip was practically nil in both hands. Sense of motion and position of the fingers was lost. Vibratory sense was lost in the wrist and elbow. The tendon reflexes were still absent. On January 15, 1924, it was noted that he continued to improve, the main disability being in the lower extremities. Sense of motion and position of the toes had returned, but the tendon reflexes were still absent. Examination, February 6, 1924, showed that he had gained about fifteen pounds in the last seven weeks. He complained of numbness in the fingers and toes. Both biceps and triceps jerks were diminished. He made all movements of the upper extremities. The ocular cardiac reflex was the same as on previous examination. By February 16 he was up and around the ward and had no complaints. The electrocardiogram showed normal tracings. The vocal cords moved freely and properly. The soft palate raised straight on phonation. His gait was normal, but the tendon reflexes in the lower extremities remained absent. The spinal fluid at this time was about the same as on previous examination. The gold sol curve was now 001221 and the mastic test 55432000.

## DISCUSSION

There appears to be little doubt in the diagnosis of post-diphtheria paralysis when the history of diphtheria, or even the suggestion of same, is obtained together with the onset of bulbar paralysis and the quite characteristic associated disturbance in accommodation; followed later by a generalized multiple neuritis. The former manifestations are often spoken of as the early and latter as the late stages. The early set of symptoms are said to come on within the first ten days of convalescence and the late to manifest themselves within fifteen days to three months after the onset of the diphtheria. Among the cases observed in this group, which represent a most severe type, makes one inclined to place the limits somewhat higher.

It will be observed this patient's early treatment with diphtheria antitoxin was quite inadequate and there was some delay in starting it. However, more cases of diphtheria paralysis are being observed in spite of the widespread use of diphtheria antitoxin. It has been our observation that there is little relationship between the resulting paralysis and amount of antitoxin given, but more between the time treatment is instigated. The explanation is not lost sight of that antitoxin treatment is responsible for many cases being carried through the

acute diphtheria stage which subsequently develop paralysis that without antitoxin would have been fatal.

The above case, among other things, shows rather widespread and unusual involvement. Paralysis of the tongue is quite rare, never an isolated manifestation, but associated with other phenomena. According to Leorat<sup>3</sup>, Vernet<sup>4</sup> notes cases by Harris, Henschen, Kast and Kinder. Mention is also made in the thesis of Ardisson<sup>5</sup>, of cases observed by Sicard and Barbe, also of Desor and Vial, also the observations of Mourefoard, Gurnier and Léorat<sup>6</sup>, another case by Moureguard in These Respant 1922. The face is rarely attacked, but may be unilateral or bilateral and of the

present its observation should easily be noted by a rather characteristic attitude of the head, namely slightly retracted and rotated to the side paralyzed due to paralysis of the sternocleidomastoid muscle and upper half of the trapezius. This case was also associated with hypoglossal paralysis on the same side.

In the series of cases previously referred to of Mixsell and Giddings they had eight cases of diaphragmatic paralysis all terminating in death, on an average, within thirty-six hours, in one case lasting eighty hours. In the series referred to in this article paralysis of the diaphragm occurred in the above case without fatal termination. Another case coming under observation about five weeks after the attack

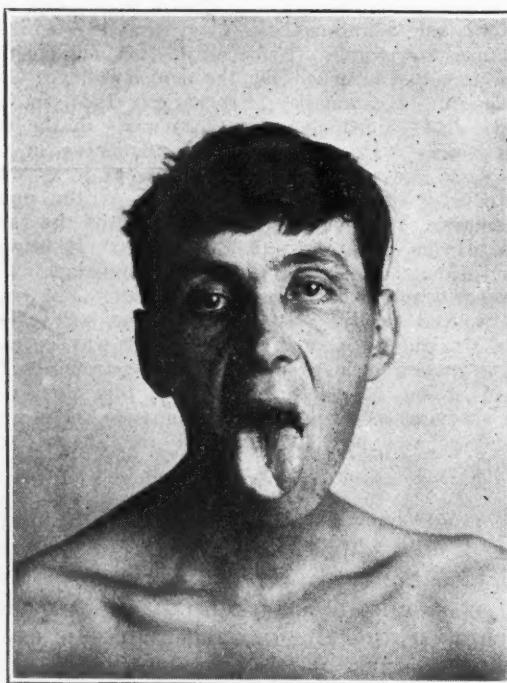


FIGURE 2.

Showing paralysis of the left side of the tongue (tip of the tongue toward the paralyzed side, non paralyzed side broader).

peripheral partial type. Thorp<sup>7</sup> reports a right sided complete facial paralysis involving the sense of taste which followed diphtheria by six months. Middle ear diseases as a complicating factor must always be considered in these cases. Leorat<sup>8</sup> feels facial paralysis is never isolated and generally incomplete. The fifth nerve is rarely involved and when disturbances are observed there is associated hypoglossal involvement. This case showed some sensory disturbance in the distribution of the fifth nerve.

Attention is called especially to the unilateral spinal accessory paralysis. Leorat<sup>8</sup> points out how infrequently it has been observed and recalls one case of Moureguard's which was associated with hypoglossal paralysis. When

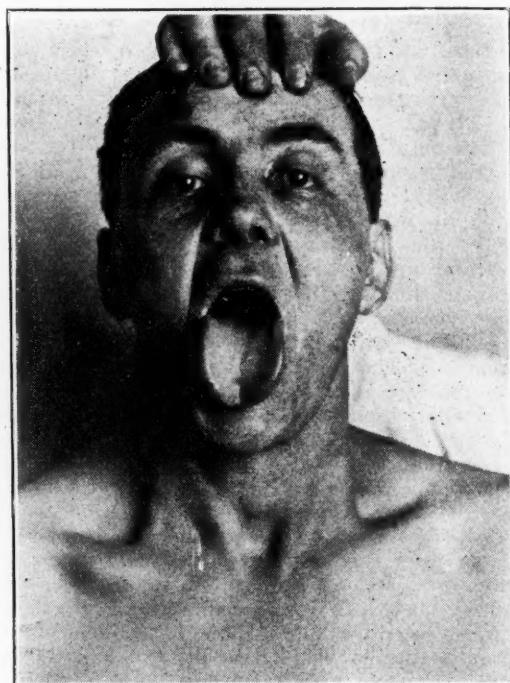


FIGURE 3.

Photograph four months following attack of diphtheria showing return of function of the left sternocleidomastoid muscle and the muscles of the tongue.

of diphtheria died within three days of pneumonia complicated by paralysis of the left leaf of diaphragm as demonstrated by X-ray. This case also showed quite extensive multiple neuritis. Marriott in 1920 advises artificial respiration in these cases to tide over respiratory embarrassment. The prodromal symptoms of diaphragmatic paralysis consisting of abdominal pain, dyspnea and rapid heart action should call for careful observation of the patient during the critical time so respiratory accidents may be avoided.

It is noteworthy that according to Regan, Regan and Wilson<sup>8</sup> (Am. Jour. of Diseases of Children, April, 1923), little has been done on the chemical, cellular and serological changes in the spinal fluid of post-diphtheria paralysis

cases. They examined a series of spinal fluids from sixteen patients and concluded changes to be limited to an increase in globulin, in less than one-half of the cases slight to moderate degree and that the colloidal gold reaction was the most constantly pathologic change. The reduction usually taking place in the syphilitic zone. They were of the opinion that previous observation on the gold curve reaction had never been recorded. The observation in seven cases in this series in which spinal fluid examination was made agrees with their observations indicating the changes to be chemical rather than cytological with constant but slight changes in the gold sol curve reaction, the mastic in two cases not agreeing with the gold sol curve, but showing more marked change in the first tubes.

Post-diphtheria paralysis, while a very disappointing complication of diphtheria, carries with it, nevertheless, a hopeful prognosis. It is obvious from the above case that the prognosis is not necessarily dependent on the extent of involvement. It is the writer's opinion that more depends on the care and avoidance of accidents which are likely to occur. Rest in bed, tube feeding when necessary, and avoidance of any exertion on the part of the patient for many months, together with administration of tonics, preferably strychnine, will see even the very severe cases on the road to recovery.

#### CONCLUSIONS

- Report of a case of post-diphtheria paralysis of extensive and unusual involvement with some observations on a series of twelve other cases.
- Associated unilateral paralysis of the VII., XI., XII. cranial nerves and the phrenic nerve (rare sites of involvement), was observed in this case.
- Paralysis of the diaphragm constitutes a serious prognostic sign.
- The changes in the spinal fluid in post-diphtheria paralysis are chemical rather than cytological and the gold sol curve shows changes in the luetic zone.
- The prognosis in post-diphtheria multiple neuritis is good and not dependent on extent of involvement.

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#### ACTINOMYCOSIS IN MAN\*

A Preliminary Review of Cases From the University Hospital of the University of Michigan by

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Actinomycosis is usually looked upon as one of the exceedingly rare types of infection in man, but a review of its literature would seem to cast doubt upon this view and to indicate that it is not an uncommon disease. In recent years especially reports of cases and groups of cases are very common, probably due to increased thoroughness of observation rather than any real increase in the incidence of the disease. In order to gain some idea as to its frequency in Michigan we have gone over the records of the Department of Surgery and the Department of Pathology and have been able to collect evidence of Actinomycosis in fifty cases, all of these cases, with but one exception, were inhabitants of Michigan at the time the infection occurred, the exception being a case residing in Ohio. These cases represent only those in which positive pathological evidence of the presence of *Actinomycosis bovis* has been secured and we feel certain that many more cases of this infection have been overlooked because of insufficient investigation and because the possibility of Actinomycosis has not been considered so that this must represent only a moderate percentage of the cases with actinomycotic infection which have been observed in this clinic.

Actinomycosis may be defined perhaps best in the words of Wright as a "suppurative process combined with granulative tissue formation, the pus of which contains the characteristic granules or "drusen" composed of dense aggregates of branched filamentous micro-organisms and of their transformation or degeneration products." The disease, "lumpy jaw," is known to be fairly common in cattle and was first described by LeBlanc in 1826. The characteristic granules were noted in a case of spinal caries in man by Van Langenbeck in 1845 and by Lebert in 1848, but the specific organism was not discovered until 1876 by Harz in granules found by Bollinger in cattle affected with the disease. The name of *actinomycosis bovis* was given to the organism by Harz. Prior to this time in 1868 Rivalta had also made studies of the granules found in the lump jaw of cattle which were the basis for an attempt to claim priority and in 1878 he suggested the name of *Discomyces bovis*. Israel and Wolff in 1878 isolated the organism from pus from empyema in man. Acland in 1886 published records of the second case of infection in humans and Nocard two years later described the first case of human actinomycosis

in France. The latter's careful studies on mycelial disease in general have caused some authorities to attach the name "nocardia" to certain of the mycelial infections. Following this time reports of actinomycosis in man became more common and investigations into the biological characteristics of the infecting agent were carried out by numerous workers. There has not been an entire unanimity of opinion among biologists in regard to the essential characteristics of the organism causing the typical lesions in man. The first important studies were published by Bostroem in 1890, during which he isolated organisms from eleven cases of actinomycosis of the jaw in cattle. In brief, he obtained a streptothrix, aerobic in character, growing at room temperature which he found to be closely allied to mycelial parasites of grains and grasses. This relationship was used by him as a basis for the theory that the disease was carried to the tissues by these foreign bodies.

Wolff and Israel in 1891 reported the isolation of an anaerobic streptothrix from two cases in the human. This organism was difficult of cultivation, not growing at body temperature, and animal inoculation showed at autopsy typical lesions of actinomycosis. The classical work of Wright, published in 1905, agrees with the work of Wolff and Israel and establishes the biological characteristics of this organism on a sound basis. He isolated the organism from thirteen cases of actinomycosis in man and concludes that one species of the micro-organism is responsible for the typical actinomycotic lesions in man. Wright does not accept the work of Bostroem and believes that he worked with contaminated organisms or secondary invaders. Since this time there has been much controversy among bacteriologists regarding the nomenclature of this group of organisms. Until recently, following Wright and others, the family name, actinomyces, comprised two genera with actinomyces bovis as the type species and nocardia for other members of the group. The committee on nomenclature of the American Society of Bacteriologists in 1920 recommended that all organisms of this type be now classified under the term, actinomyces.

Colebrook in England in 1920 and 1921 reported further extensive studies of actinomyces in man, largely substantiating the work of Wright. In summary it seems likely that the vast majority of cases of actinomycosis in man and animals are caused by the type, actinomyces bovis, which forms typical "sulphur granules" with club-shaped ray, anaerobic, difficult to culture and not acid fast. This organism is the one causing the lesions in cases reported here by us.

The first case of actinomycosis to be brought forth in America were those reported by Mur-

phy of Chicago in 1885. In 1899 Ruhrah published a collection of 58 American cases, collected from all available sources. He added to this four cases in 1900, thus bringing the total to 62 cases. His thorough discussion of the subject bore fruit and shortly numerous further cases were reported. Erving in 1902 brought the literature to date and brought the total number up to 100 cases. Isolated case reports and articles dealing with its clinical aspects were not infrequent and in 1921 Sanford and Magrath collected 119 cases from the literature and were able to add 96 cases of the disease observed in the Mayo Clinic. Since then, in 1923, Sanford, in an attempt to study the distribution of actinomycosis in the United States, has collected a grand total of 678 cases from every available source. This number must represent only a comparatively small proportion of the number of individuals afflicted with the disease, as no doubt, many of them escape diagnosis, and a large number are not reported. In his study of the distribution of the disease he finds it especially prevalent in the upper Mississippi valley, but the actual distribution cannot be known until diagnosis is more common and a system of reporting is established. In this series we find a general distribution throughout the state, no one section seemed immune. The important point would seem to be that, contrary to our previous ideas, the infection is not uncommon and that, once we are on the lookout for it, many more cases will be recognized than at present. The anatomical distribution of the infection is shown in Table I.

This anatomical distribution does not differ largely from that found by others, except that we have a definitely larger percentage of abdominal infections, but the number in the series is too small to permit the drawing of conclusions from such a fact. A comparison with other statistics is given in Table II. The chief interest about the anatomical location has seemed to us to be that it is universal, no region of the body is exempt, and while no case of involvement of the brain or central nervous system has come under our observation, a number of cases of actinomycosis of the brain are recorded. We look for it especially in lesions about the mouth and right side of the abdomen, but the possibility of its presence in lesions in any other part of the body must be considered.

A detailed report of the cases and any statistical analysis of them is beyond the scope of this paper, but certain general statements can be based on the findings in them. The disease may attack individuals of any age, but it more often is found in young adults and in those of active middle life, the youngest was ten years, and two others were under fifteen years. Only four of the series were women. Infection

among those working with the soil and its products predominated, but no conclusions should be drawn as this is true of this clinic's cases as a whole, and recent statistics by others seem to show that association with grain and the animal industry is not necessary to the infection.

#### METHOD OF INFECTION

A mass of evidence has been collected by many observers regarding the source and mode of infection, some of which is conflicting. Direct transmission to man from lower animals has been denied by many, and if it does occur, is exceedingly rare, although Mattson in a recent article gives evidence of frequent occurrence in those associated with infected cattle, while but one case, that of McKenty, is reported of direct infection from man to man. The two main theories of manner of infection are those of Bestroem and Wolff and Israel, both amplified by later writers. In brief, Bestroem's theory is that the infection is carried into the tissues by grass or grain and its coverings, supported by the facts that such types of foreign bodies have been found in the lesions in animals and that the endemicity of lumpy jaw in cattle fed in certain marshes has been noted.

Many cases are observed in man in which grass or grain or straw has been found at the site of the infection. The evidence is circumstantial and it may be argued that these foreign bodies merely cause the abrasion through which the infecting micro-organism enters. The theory of Wolff and Israel, later strongly advocated by Wright, is that the organism causing the typical lesion in man does not grow on grasses, is most difficult of cultivation and it is difficult to conceive of any connection between this organism and those found on grasses and grains. It is believed by these workers that the actinomycetes bovis is a natural inhabitant of portions of the gastro-intestinal tract, especially in the mouth, and given proper conditions, such as lowered resistance and a portal of entry, the organism may cause progressive lesions. Its presence in carious teeth and tonsils was found by Lord, but the experiments were not carried to a logical conclusion. In our series the organism was found in the tonsils in six cases only in seven thousand examined, which would seem to cast doubt upon the frequency of the tonsils as a focus. There are two recorded cases, one by Cope and one by McWilliams, in which actinomycetes developed on the knuckle following an abrasion on the tooth of an adversary. Investigators of the flora of carious teeth do not report the presence of actinomycoses in any frequency. In any case it would seem that the organism requires firstly, the conveyance to a portal of entry in the body, and secondly, an abrasion of the tissues must be present. It is possible that

the continued irritation of any foreign body makes the progress of the infection more likely. In one of our cases a farmer ran the tines of a pitch fork into his forearm while stacking straw. The wound was infected and discharged purulent material for four weeks, then the discharge ceased, leaving a nodule about 3 cm. in diameter. It remained quiescent for four months, when it began to enlarge. When seen eight months after the injury, the mass was roughly, 8 cm. in diameter, presenting signs of a low-grade inflammation. The mass was excised and shown to be actinomycosis, but no foreign body was found in the lesion. Another interesting case was that of a child who had aspirated portions of a peanut shell. She developed signs of a pulmonary infection, which was diagnosed as purulent pneumonia, with abscess and which at autopsy showed definite actinomycotic abscess of the lung. The portal of entry varies, and as shown by the location of the lesion the mouth is the most frequent site, followed closely by the lower portion of the gastro-intestinal tract, and third, the respiratory passages, followed by other parts of the body. It is noticeable that carious teeth are usually found associated with lesions of the buccal cavity acting as a carrier of the infection or as a producer of the necessary abrasion for the portal of entry. Infection following extraction of teeth is not uncommon. In many of our cases of infection around the jaw the presence of poor dental condition was noted. The invasion of the intestinal tract takes place from within and the appendix and caecum are the commonest sites. In two cases the appendix was removed for acute appendicitis, the actinomycetes being found during the course of a routine examination. These cases were early and both recovered. The other cases of abdominal infection all had been operated upon for appendicitis with the persistence of sinuses and with extension of the infection to adjacent parts. The histories of the acute attacks were not typical of acute appendicitis in most cases, but seemed compatible with such a diagnosis. That other portions of the gastro-intestinal tract may be involved and that the appendix is not the sole offender seems unquestioned. One peculiar case was that of E. B., age 37, a machinist who presented an incarcerated left inguinal hernia. At operation an inflammatory mass of omentum was found in the sac and completely excised. The examination of this showed "chronic omentitis, large colonies of actinomycetes". His recovery was uneventful and he is well after three years. The original focus must have been some portion of the gastro-intestinal tract, perhaps the appendix, but not necessarily so. The appendix or its neighborhood seems to be by far the commonest site for infection. Primary involvement in the stomach is unknown and of

the upper portion of the gastro-intestinal tract, rare. It is possible that an attack of appendicitis provides the necessary destruction of tissue favorable to the invasion of an infecting agent already present and that the actinomycetes are not always the original etiologic factor in the original lesion. We have included two cases of perirectal actinomycosis with the gastro-intestinal group, inasmuch as it seemed logical to suppose that infection in these cases occurred from within outward, although in neither case was there direct evidence of this at the time of examination.

The thorax may be invaded by way of the aesophagus or by means of the respiratory tract through the aspiration or inhalation of the infecting agent with or without a foreign body. Skin infection is not common and probably always occurs through abrasions. Infections in other parts may be either metastatic or by contiguity from other organs. Some of the infections of the abdominal wall may be infections from without inwards and the location of the two of these in the waist line made us believe that irritation by the belt might be a factor in their production. The actinomycetes tend to spread by continuity, especially in connective tissues, but rarely along lymph channels. The lymph nodes are not commonly involved, except by the secondary invaders which are usually present and which may dominate the picture. The peritoneum offers some resistance to it as the extension is more in the retroperitoneal tissues. In any given process local healing may be found at the periphery of portions of the lesion and ultimately a marked tendency to haematogenous metastases occurs.

The clinical symptoms vary markedly with the site involved. In the infection around the mouth the teeth are usually in wretched condition, a history of extraction may precede the onset. The lower jaw and its surrounding tissues are usually the portions involved, the infection entering the floor of the mouth or along the opening. An indurated swelling, usually circumscribed, is present, is smooth and hard, "woody phlegmon." In from two to four months often breaking down and sinus formation takes place. The swelling is not marked internally and sinuses in the mouth are uncommon. Ulceration of the skin is not common except following operative procedures. Secondary infection is usually present. Trismus is often a prominent symptom. The bone may be infected early or late and sequestration thus occurs. Tonsillar infection may cause late involvement of the soft parts in the region of the angle of the jaw.

The involvement of the gastro-intestinal tract may present two clinical pictures that may be called the acute and chronic types. The acute type may be illustrated by the history of E. S., age 20, whose family history was negative. The

past history was negative except that three months previously he had an attack similar to his present illness, but of a milder nature. The evening before entrance he began to have generalized colic pains in his abdomen. During the night he was nauseated and vomited. By morning the pain had localized in his right lower quadrant and examination showed a young man of robust physique with muscle spasm and tenderness over McBurney's point. His temperature was 99.6 F. and his leucocytosis 12,400. A diagnosis of acute appendicitis was made and at operation an acutely inflamed appendix was removed. His convalescence was uneventful and he is well one year after the operation. The appendix showed "chronic recurrent appendicitis with recent suppurative exacerbation." Abscess in the meso appendix and in appendix wall. Small colonies of actinomycetes found in abscesses, colonies small." In other words, the history, examination and findings are those of a typical acute appendicitis with the actinomycosis only found by routine pathological examination. The process was early and was apparently entirely abolished by operation.

The chronic form may be illustrated by the case of H. F., a laborer, age 51, who gave a history of trouble starting five months before examination. At that time he began to have cramping pains of moderate severity generalized over the abdomen, but most marked in the right lower quadrant. He remained in bed three days, was then up and about for a time, had several similar attacks at irregular intervals. No nausea or vomiting was ever present. One month ago, noticed a tumor mass in the right flank and right lower quadrant. Since then there has been a dull constant pain in the region of this mass. Lost 30 pounds in weight in the last five months. Examination showed a man somewhat emaciated with a mass, roughly spherical in shape and 10 cm. in diameter in the right flank and lower quadrant. This was tender, but not exquisitely so, hard firm, but of a uniform consistency. A mass could be felt by rectal examination. His temperature was 100.8, his leucocytosis 12,000. Incision into the mass disclosed loculated cavities containing thick yellow viscous pus containing typical granules. The walls of the cavities bled profusely on exploration with finger. Nothing further was done at this time. He gradually grew weaker and died three months later. Autopsy showed abscesses around the appendix, in the liver and in the lungs, abdominal wall, with typical actinomycetes present in all of them. In this case the history is that of a somewhat insidious onset with the development of a tumor in the right lower quadrant. In this case actinomycosis might well have been suspected before the final proof was made by the actual finding of the granules. There must

be all stages between these types. Several other cases presented sinus formation failing to close after appendectomy had been done for acute appendicitis with abscess formation and in this type of case this lesion should always be considered.

In the thoracic form of the disease in those cases with the lesion confined to the lung the symptoms are often those of bronchiectasis with foetid sputum, or perhaps there may be evidence of a lung abscess as in the case mentioned. The other and perhaps commoner form is that in which the chest wall is perforated with formation of abscesses in it, at the same time the lung, usually the lower portion, may be widely invaded. The typical findings in the pus from these abscesses or in the sputum will give the correct diagnosis.

The clinical findings in other localities are those characterized by a chronic low grade infection with sinus formation in that particular region, with special symptoms peculiar to that region. In this series were two cases of actinomycotic infection of the spine, both diagnosed as tuberculosis. The X-ray findings were compatible with tuberculosis of the spine and in only one was the diagnosis of actinomycosis made before death by the finding of the granules in the discharge from a spinal abscess. Autopsy fixed the diagnosis in both of the cases.

The diagnosis is often not easy and cannot be made with certainty until the sulphur granules of *actinomyces bovis* are demonstrated in the pus from the abscess or found in tissues from the lesion. In the cervical region the diagnosis is often confused with tuberculous adenitis, alveolar abscess and sarcoma. Actinomycosis does not suppurate until late and the lymphatics are not primarily involved. When the lesion is broken down the diagnosis is easier as the granules may be found in the pus, but in the indurated lesions without a discharge biopsy would seem necessary for diagnosis. In either instance, that is a search in pus for granules or a biopsy, a single negative result does not discredit this diagnosis, as many specimens may be negative before a positive finding is made. This is especially true of those cases with severe associated pyogenic infection which may disguise the true character of the infection. We have found the organism after many negative investigations in suspected cases. Dilution of the suspected pus in water may bring out the granules, whose character should be confirmed by further examination with the microscope. We have made a tentative diagnosis in several cases by the presence of a sign noted during incision of the abscess. The abscesses are usually loculated and in every case the hemorrhage occurring while the examining finger investigated the extent of the abscess and broke down the wall of the loculi, was far more marked than one ever will see in a simple

pyogenic abscess. The bleeding is often severe enough to make one think of a vascular sarcoma. This sign has in several recent cases made us investigate until actinomycosis was definitely diagnosed. We have not seen this sign described elsewhere, but we feel that it has definite diagnostic value. The abdominal lesions are usually confused with tuberculosis, or less often, carcinoma, especially with a palpable mass in the right lower quadrant. But its palpable characteristics are usually sufficient to discriminate between its smooth contours and the more nodular surface of the carcinoma. A barium enema will usually show the large bowel to be more definitely involved with obvious defects in case of carcinoma. The lesions of tertiary syphilis have to be distinguished at times from actinomycosis. The gumma is less painful and if it breaks down, presents an ulcer with a typical base rather than the sinus formation present with actinomycosis. One of our cases showed a positive Wassermann reaction and was shown to have both infections. In summary any indurated lesion in the region of the jaw and any smooth tumor mass in the right lower quadrant should be suspected. If following appendectomy, a sinus persists, or if in any part of the body an abscess continues to drain unduly long, careful investigations should be made to prove or disprove actinomycosis.

The treatment is not satisfactory and the best results are obtained in the lesions around the face and neck. It goes without saying that fresh air and good food are important. Surgical treatment consists of incision and drainage and whenever possible, excision. Incision should be adequate and the loculi should be opened to admit of proper drainage and the use of antiseptics locally. Extensive operations designed to abolish the disease in well advanced abdominal cases are not successful and do harm. The intestine is not usually markedly involved and its resection will rarely remove the disease. Antiseptics have been recommended; both iodine solutions and copper sulphate have been lauded. In our cases they did not seem to be of any special utility. Of drugs, potassium iodide has been used in nearly every case recorded. The dosage varies enormously with different writers. Some regard it as a specific, others are sceptical. Certainly it should be tried and, we believe, in large doses. X-ray and radium have strong advocates, but it again is impossible to say whether they alone have helped, as all cases thus treated are treated along other lines. We have utilized X-ray, but cannot state whether it helped or not. Colebrook used vaccines in twenty-five cases in conjunction with surgical treatment and feels that his results were improved thereby. He regulates the dose by the patient's reaction, starting with small doses of half a million

fragments. We have had no experience with the vaccine. Undoubtedly all of these measures may be used in conjunction and this intelligent synchronization will give the best results.

The prognosis is good in those cases with infection around the face, as these localized lesions spread very slowly and tend to heal. The prognosis of abdominal cases with sinus formation is bad; one is tempted to say utterly bad, but cases are on record of recovery, but never after the lesion has ceased to be well localized. The thoracic cases all have a gloomy prognosis, recovery being almost unknown. Local superficial lesions elsewhere, like those on the face, carry a fairly good outlook.

#### SUMMARY

Actinomycosis is not an uncommon disease in Michigan. Infection usually occurs along some part of the alimentary tract.

Actinomycosis should always be suspected in cases showing tumors in the region of the neck, face, jaw, thorax or the right side of the abdomen and flank.

All abscesses tending to chronicity should be investigated for its presence.

The occurrence of an undue amount of bleeding following incision and drainage of abscesses should make one suspect actinomycosis.

Better dental hygiene and abstaining from chewing straw, grains and grasses may reduce its incidence.

Local lesions, diagnosed early, are curable. Well established internal lesions are fatal.

We wish to express our thanks to Dr. Warthin, Director of the Pathology Laboratory, for his kindness in allowing us the use of his files and material.

#### TABLE I.

Regional Distribution of the Infection.	
The primary location is noted as accurately as possible. Extension to other parts not tabulated.	
Cervico-facial:	
Jaw	6
Neck	3
Cheek	1
Cheek and Superior Maxilla	2
Tongue	2
Tonsils	6
Abdominal:	20—or 40%
Abdominal wall	3
Abdominal wall with scrotum and perineum	1
Right Iliac Fossa	7
Appendix	2
Omentum	1
Liver	1
Ischio-Rectal	2
Thorax:	17—or 34%
Lung and Chest Wall	4
Lung	1
Genito Urinary Tract:	5—or 10%
Kidney	2
Perinephric Space	1
Skin:	3—or 6%
Forearm	2
Gluteal Region and Thigh	1
Bones:	3—or 6%
Vertebrae	2—or 4%
Total	50

TABLE II.

Cases	Head and Neck	Thorax	Abdomen	Pelvis	Extremities	Skin	Bones	Genito-Urinary	Unknown
New and Figi 107	68.1	7	20.3	2.5	1.9	0	0	0	0
Erving ..... 100	53	20	23	0	4	0	0	0	0
Illich ..... 421	55	15	20	0	0	2.5	0	0	6
(Ruhrah)									
Pres. Series .... 50	40	10	36	0	0	6	4	4	0

Table II. Comparison of Anatomical Distribution with Other Series of Published Cases.

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#### A PRELIMINARY REPORT ON THE VALUE OF ETHYLENE AS A GENERAL ANESTHETIC BASED ON THE STUDY OF 500 CASES

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On each occasion when some new candidate for favor in the field of general anesthesia is brought forward, it is proper that we should reassess the values of the general anesthetics now at our disposal with a view to seeing whether or not there is some portion of the field not satisfactorily occupied which the new candidate may occupy if claims be substantiated.

The oldest inhabitants of this field, entitled to respect at least because of their age, are chloroform and ether. True, their reputations have suffered considerably from the encroachments of modern science, but they still hold positions which are relatively secure and likely to endure.

In the case of chloroform it will be a long time before it is driven from the field for use in the tropics and in war. Its superiority over ether in tropical climates is beyond question and its superiority in war is, in my judgment, equally beyond question. In the latter field its relatively small bulk and consequent ease of transportation makes it available where the bulk of ether would result in its being generally marked "missing." In the recent European unpleasantness, chloroform played a great part, partly for the reasons just mentioned and partly because of the much shorter time re-

quired to get full surgical anesthesia. Under ordinary circumstances this loss of time is unimportant, but where, as during the years from '14 to '18, many of the hospital units on both sides were trying to deal with twice as many casualties as they could handle, the saving of from three to five minutes on each operation will, in an active "establishment," mean the increase of casualties properly dealt with by from forty to a hundred. This means so many lives saved which would have otherwise been lost. In this respect, therefore, its position is secure. In somewhat similar fashion it will always be the convenient anesthetic for emergency use in out-of-the-way places with exploring parties and any folk, in short, who live more or less at war with their surroundings.

The case for ether is even more secure. It may safely be regarded as the "wheel-horse" of anesthesia which for years has done the bulk of the work to the enormous benefit of humanity. Its greatest claim is that it is extraordinarily safe so far as the immediate result is concerned, and like its more modern contemporary in the field of transportation, the Ford car, it is almost absolutely fool-proof. These are great qualifications and will long maintain for it a position of qualified respectability. On the other hand, a more searching investigation of its position shows it to be assailable at several points—it is unquestionably true that the direct mortality following immediately upon the administration of ether is so small as to be almost negligible, but the number of casualties ultimately referable to its use is by no means unimportant. Many of the disturbances of the lung occurring after operations done under ether are more or less direct consequences of its use and should be charged on the debit side of the column. It is our best judgment that in many patients whose death certificates show various forms of pneumonia the results are primarily attributable to the irritating properties of the ether used at operation. There is, of course, a definite group of cases with known disease of the lungs in which there is an almost absolute contraindication to its use. Its unfavorable affect upon the kidney, as shown by the common occurrence of albumin and possibly of casts in the urine after operation is, we suspect, an over-rated source of real danger. The transient renal irritation which regularly occurs with both chloroform and ether is probably negligible and it is not difficult to recall many patients with grave renal damage who have withstood prolonged ether anesthesia without obvious harm. Clearly the position of ether is secure as the common anesthetic for general use under a great variety of conditions.

During the last generation the position of ether as the anesthetic of election has been definitely challenged by the introduction of the

newer methods of anesthesia with nitrous oxide gas combined with oxygen, but many circumstances have conspired to make this challenge relatively unable to shake the established position of ether. The administration of these gases requires relatively complicated and cumbersome apparatus. In order to obtain results which can be regarded as tolerable, very considerable skill and long experience are necessary. It is not, and is not likely to become the anesthetic of every day use, and its administration is practically confined to hospitals, or at least such conditions as enable an expert anesthetist to be available at all times. Moreover, its claim to safety cannot be admitted without discussion. This claim has been distinctly clouded by the tendency to include in the statistics of the subject a very large number of cases in which the anesthesia was so brief and trivial as to hardly deserve to be called an anesthesia at all. If we are to estimate justly the claims of nitrous oxide and oxygen to safety, we must begin by discarding all the cases in which it is given for operations lasting only a few minutes and in which the problem of the accurate mixture of gases hardly arises at all. If we confine the discussion of its claims to cases in which the duration of the operation exceeds thirty minutes we are likely to find that its claims to safety will not stand comparison with ether, or even with chloroform. It is our well considered judgment that even in the hands of the expert anesthetist this anesthetic is more dangerous than either ether or chloroform.

It is important, however, to recognize that this statement should not be taken to very seriously shake the position of this anesthetic in the field. Its claims are substantial and entitled to recognition for short operations. The entire absence of the disagreeable features associated with ether and to a less extent with chloroform, are really important. It is clearly the least unpleasant of any of them. It has a recognized and assured position in cases of known disease of the lung and is entitled to serious consideration in known disease of the kidney. Perhaps its greatest stronghold is in cases complicated by shock, that clinical entity, the exact nature of which remains obscure. Its claim to being at the present time the anesthetic of election in shock was secured by the experience in the late war. Here, in a very large group of cases, it was shown beyond peradventure that the mortality of operations on patients in shock done under anesthesia with nitrous oxide and oxygen was importantly less than those in which either chloroform or ether was used. This observation appears to have a sound scientific foundation. It is known that both chloroform and ether, used over any considerable length of time, make a serious draft upon the alkaline reserve and that this in turn

unfavorably affects shock production. It has been satisfactorily shown that though nitrous oxide and oxygen draw somewhat upon the alkaline reserve, that this draft is importantly less than with the other anesthetics. At the present time, therefore, and leaving the new candidate for favor, ethylene, temporarily out of consideration, we may safely assert that for operations on patients in shock or upon patients in whom the occurrence of shock may be anticipated, nitrous oxide and oxygen is clearly the anesthetic of election wherever its safe administration is possible.

This brings us to the consideration of the requirements which should be met by any new candidate in this field asking for serious consideration. It must, we think, be shown for such a candidate that it has properties not possessed by previous occupants of the field. In the case of ethylene it comes up for consideration with the claim that it can displace the nitrous oxide and oxygen from its present position. If it is to do so, it will be required to "pass muster" on various special tests which may be briefly enumerated as follows:

1. It must be shown that its administration is free from the disagreeable effects of ether and that in this regard is on a par with nitrous oxide and oxygen.
2. It must be shown that its administration is at least not more complicated and difficult than the above mentioned anesthetic.
3. It must be shown that it is relatively safe and, if it is in fact to displace nitrous oxide and oxygen, it must be shown that the risk is definitely less.
4. It must be shown that it will give greater degrees of muscular relaxation than have been previously obtained with gas, "this being perhaps the annoyance most commonly noted by the surgeon and which has importantly limited the availability of "gas."
5. Finally it must be shown that its affect upon shock, whether existant or anticipated, is relatively favorable and that it can here compete on an equality with "gas."

The following observations are put forward as a contribution to our present knowledge of ethylene as an anesthetic. We quite recognize that many candidates for favor in the field of anesthesia have made a relatively favorable showing in the earlier part of their career, only to be permanently discarded because they finally developed some grave disqualification. We are quite aware that no conclusions can be drawn from any series as small as 500 cases, but we believe that the reporting of small groups of this kind by a great variety of observers under differing conditions will at a relatively early period enable us to draw satisfactory conclusions.

#### GENERAL REPORT OF 500 ANESTHESIAS GIVEN IN OUR CLINICS

Of a series of five hundred anesthesias with ethylene and oxygen, it is very easily observed that the patients make much better recoveries and have less lowering of vitality and general tone than when using any other anesthetic.

In this group of cases only two per cent vomited or complained of nausea and the longest period was twelve hours after operation. The balance of this group cleared up readily, often asking the surgeon questions in the operating room five minutes after stopping the anesthetic, orienting themselves readily.

*Operations on Prostrates*—At no time is the choice of an anesthetic a matter of greater importance than in the case of elderly men who come to the urologist for aid. The renal pathology with the cardiac and vascular system at low par requires an anesthetic which will not disturb the heart action, irritate the lungs, cause too high blood pressure or depress the excretion of urine. Twenty-six rather low grade cases treated by operation could take water in large quantity within half an hour after the operation, which prevented the dehydration that usually takes place when the patients vomit for twenty-four hours. They do not perspire while taking this anesthetic as a rule, and are dry and warm. Therefore, they do not go into shock easily.

*Operations on Gall Bladders*—In the twelve cholecystectomies we were obliged to give some of the cases a low grade ether for ten or fifteen minutes when the reflex disturbance of respiration interfered with the progress of the operation. In this way we would use from one half to an ounce of ether during the operation. In two of this type of case we were obliged to change to an open ether for a period of a half hour. After the adherent gall bladder was removed, the remainder of the operation was completed under ethylene and oxygen. Fifteen minutes after stopping the operation the patient answered questions readily, but showed some remaining saturation of ether. Recovery was uneventful with no vomiting after the first six hours.

*Operations on Stomach*—In sixteen stomach cases there was no need of ether and the patients made very nice recoveries. One case of perforated ulcer in which a gastroenterostomy, excision of ulcer and appendectomy were done, showed marked resistance to the anesthetic, was changed to a continuous mixture of ethylene, oxygen, ether, two ounces per hour, and went through the operation with fair relaxation, reacted in twenty minutes and vomited a small amount during the first twelve hours.

There was one splenectomy in this group. The blood pressure went up ten points in the first fifteen minutes and returned to normal, remaining steady throughout the operation. The

patient reacted readily and without being nauseated. He made an uneventful recovery.

*Operations on Mastoid*—Included in this group are twelve radical mastoid cases, ranging from six to seventy-four years of age. The induction period in these cases was two minutes, followed by a very quiet, even anesthesia, using fifteen per cent oxygen, ethylene eighty-five per cent. They reacted readily on the operating table. No vomiting. Recovery uneventful.

*Operations on Frontal Sinus*—One Killian operation (radical) was done on a very frail patient aged 34, who had parenchymatous nephritis. The operation lasted two hours and thirty-five minutes. Pulse, respiration and blood pressure remained very constant until the last half hour of the operation, when the pulse went up from 110 to 126 and the blood pressure began to fall. Both returned to the existing condition before operation after giving normal saline infusion. The patient reacted readily and made an uneventful recovery without vomiting or nausea.

*Operations on Thyroid*—The eight thyroidectomies were very satisfactory—quiet, even analgesia and slow, full pulse when we carried out from twenty to seventy-five per cent of oxygen and from eighty to twenty-five per cent ethylene in the mixture. They reacted readily and had no vomiting after the operation. Three vomited in the operating room while the bandages were being adjusted. There was no nausea after returning to bed. Premedication in each case had been one-sixth grain of heroin hypodermically one-half hour before operation. Very uneventful recovery.

*Bone and Joint Operations*—This group covers a large number of very frail, low tone patients from the age of two to sixty with extensive osteomyelitis, reduction of congenital hip, transplantation of nerves, reduction of fractures, etc., and long tedious operations that used to leave the patient in an exhausted or shocked state. This has been greatly reduced since we have used ethylene as they take their fluids readily and continue with their normal nourishment.

*Choice of Anesthetic*—Ethylene has been the anesthetic of choice in such cases as chronic bronchitis, pulmonary tuberculosis, nephritis, marked anemia, diabetes—any condition with a very fast heart rate—with very good results.

#### PROCEDURE OF ADMINISTRATION

Any gas-oxygen anesthetist can give ethylene by studying the difference between the two anesthetics. With this anesthetic we use no re-breathing. In abdominal cases, start the anesthetic with ten per cent oxygen and ninety per cent ethylene. The pupils dilate, then contract to the size of the pupil in the average ether anesthesia. This takes from two to five minutes and the average case runs on a mix-

ture of ten per cent oxygen and ninety per cent ethylene or twelve per cent oxygen and eighty-eight per cent ethylene. The anesthesia is more even than with nitrous oxide and one can feed three breaths of 50 per cent oxygen and 50 per cent ethylene frequently without disturbing the anesthesia. If the patient tries to vomit at any time during the operation, flood with 100 per cent oxygen until he has had at least two breaths, then return to the normal mixture and in half a minute the anesthesia is as smooth as if nothing had occurred. Never try to stop vomiting by a heavier per centage of ethylene as it increases the difficulty and prolongs the disturbance. The patients have regular slow even respiration, slow pulse, color normal, or slightly flushed, skin dry and warm. Do not allow any cyanosis. Keep the air passages well open with an air way if necessary and increase oxygen to 15 per cent in the mixture if they will not stay clear. Where a large amount of premedication is used, more oxygen is indicated in the mixture. At the end of the operation give a few breaths of oxygen. They react easily and orient themselves readily. Some try to vomit as they are coming out. Others do vomit once or twice while reacting and not afterwards. In infants and children of this group we find that they take it much more easily and are in much better condition during and after taking ethylene than after taking nitrous oxide and oxygen or ether.

#### DANGERS

Ethylene is very inflammable and cannot be used in the presence of an open flame—cautery, high frequency current, loose joints, of any electrical apparatus as poor light fixtures, electric motors for bone work, electric fan, lighted cigarette, etc. It is easily ignited as it diffuses all through the air and will explode with a one per cent mixture of ethylene and air.

Referring back to the four important points of this paper as to ethylene as an anesthetic:

1. Its brief induction with no irritation to the air way, good ventilation, normal color, dry warm state of the patient, which has been true to the end of three hours of anesthesia, with the patient reacting readily with only slight nausea when he first awakened, with no disturbance of other functions as the lungs, kidneys, heart—seems to make it superior to ether for a wide range of cases.

2. In its administration it takes a similar apparatus to that used for nitrous oxygen and oxygen, with a more even and less transient anesthesia than nitrous oxide.

3. Though it has been used for a short time it has given a very good impression with its many good qualities. At the present time its safety cannot be judged until there is better control of such accidents as occur from it being very inflammable.

4. It clearly gives more relaxation without saturating the patient to as marked degree as is necessary with nitrous oxide and oxygen.

### LAPAROHYSEROTOMY IN THE EARLY MONTHS OF GESTATION

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Under ordinary circumstances, therapeutic abortion is performed by the vaginal route. The gravid uterus is emptied from below by methods varying according to the nature of the case, or the predilection of the operator. This practice is based on good obstetrics, for experience has shown that the pregnant uterus will stand much operative procedure and trauma, provided the peritoneal cavity be not opened, or its lining membrane, the peritoneum, be not too roughly handled. The poor results of Cesarean section, the country over, may be said to result from failure to appreciate the fact that while the uterus with an intact peritoneal covering will stand much abuse and resulting sepsis, no such immunity results from opening the abdomen and incising a uterus whose interior is septic or even potentially septic.

Occasionally, however, the obstetrician is confronted with the necessity of emptying the uterus to save or safeguard the life of the mother, who at the same time should be protected from future conception by sterilization.

It is perfectly possible, of course, first to empty the uterus and sterilize the patient later. Yet this means two operations, two periods of convalescence and additional expense. Where the condition of the patient warrants, the Cesarean section patient is always sterilized at that operation and not subsequently.

The following two cases illustrate how the uterus in the early, not the late months of gestation, may be emptied and the patient sterilized at the same operation. These cases are reported not as illustrating anything particularly new in the way of technic, but to emphasize a procedure not commonly followed at the present time.

#### ILLUSTRATIVE CASES

Mrs. G. W., Case No. 11,325, age 33, married, referred by Dr. A. E. Green of Lansing, entered the obstetric and gynecological clinic of the University Hospital April 12, 1920. At entrance she complained of backache, headache and swelling of the hands and feet.

She had been married nine years. During this period she had been pregnant five times, the first pregnancy occurring six years previously. Towards the end of this pregnancy she became edematous and had five convulsions before and one after the child was born. To save her life the doctor took the child. She was torn through into the rectum and had incontinence until the complete tear was repaired.

She was very toxic toward the end of her second

pregnancy, which was terminated by extraction of the child before she had convulsions. Her third and fourth pregnancies ended normally. Last April, during the fifth month of her fifth pregnancy she became very edematous and short of breath. At the seventh month she had severe headaches and a little later became blind. She had eleven convulsions and was taken to this hospital and delivered.

Examination was quite negative. The patient was between four and five months pregnant, but there was no edema and the urine showed neither albumen nor sugar. The blood pressure, systolic 142, diastolic 90, was somewhat high for a woman of her years, but this was only significant and important in connection with her history.

Naturally the patient, because of her past rather terrible experiences, was quite alarmed and anxious that the present pregnancy be interrupted. After due consultation and careful consideration it was decided the patient's life would be seriously imperiled by allowing the pregnancy to continue and that it should be interrupted before and not after the appearance of toxic symptoms. Further, it was deemed advisable that the future be safeguarded by cornual resection of the oviducts, so that conception should be rendered impossible.

April 30, 1920, the pregnant uterus was exposed through a longitudinal suprapubic incision. The gravid uterus was delivered through the abdominal incision and packed about with gauze and a two and one-half inch incision made in the anterior uterine wall. The latter was incised carefully, so that the gestation sac was not opened, but was expressed intact by compression on the posterior uterine wall. The uterus firmly contracted after one cubic centimeter of pituitrin was injected into the uterine wall. All remnants of placenta were removed by the finger and a dull curette. Good drainage was secured by a moderate dilatation of the cervical canal by a hemostat introduced through the uterine wound. The latter was closed by a continuous layer of number one chromic catgut, the peritoneal edges being inverted by a continuous chromic gut Lembert suture.

The patient was then sterilized by cornual resection of the tubes, great care being taken that the peritoneal edges of the wedge shaped incisions were inverted by interrupted Lembert sutures. The cut ends of the tubes were buried beneath the peritoneum of the broad ligaments.

The patient had practically no vaginal bleeding, nor rise of temperature and was discharged after an uninterrupted convalescence.

#### CASE 2

The second case was similar to the first in many respects. It differed, however, in the very important particular that the patient was under our direct observation during her first two confinements, enabling us to determine the degree of toxemia present.

Mrs. G. M., case No. 18,139, aged 21, married, referred by Dr. C. S. Sackett, Charlotte, Michigan.

The patient was married in 1920 at the age of 17. She has had five pregnancies, only one of which went to full term. Two children are living, aged four and two years.

At the end of the first pregnancy she developed toxic symptoms which persisted in spite of treatment. She finally developed eclamptic convulsions and was delivered by forceps. She and her child made good recoveries.

Two years later she became toxic at the seventh month of her second pregnancy. She was in convulsions when she entered the maternity ward. This labor was forcibly terminated and both the child and the mother lived, although the latter had a post-partum pneumonia.

Following her discharge from the hospital, she had two induced abortions at about the third or fourth month, her physician fearing to allow the gestations to develop. Her last menstrual period was April 26, 1924, so that when she entered the University Hospital she was slightly under three months pregnant.

The pregnancy was interrupted and the patient sterilized for practically the same reasons detailed in the first case. The operative technic was the same except the incision in the uterine wall was slightly smaller, measuring only two instead of two and one-half inches. Since the operation, performed July 14, 1924, the patient has made an uninterrupted recovery and will be discharged from the hospital within the next few days.

#### DISCUSSION

1. Laparohysterotomy in the early months of gestation should be reserved for cases where it seems desirable not only to empty the uterus, but also to sterilize the patient.

2. It should not be employed for ordinary cases of therapeutic abortion, since it is much safer to empty the uterus from below.

3. The operation never should be performed in the presence of fever or other signs of sepsis.

4. It is contraindicated in organic disease, or where the patient is toxic and where a laparotomy might be the deciding factor in causing or hastening the death of the patient.

#### THE TREATMENT OF CHRONIC NEPHRITIS

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In this era of laboratory diagnosis, when in almost every Journal there is some article dealing with some new laboratory method, I have often wondered what the doctor in the field thought. One author says his method is the only one which will give information helpful to both doctor and patient; another author says the first writer is all wrong, that his method is the only one to use. Amidst all the conflicting opinions it might seem that the doctor's reaction would be to consign the whole crew of authors to the nether regions to squabble among themselves without being heard by the mass of men who are weary of polemics.

In recent years there has been an enormous amount of work done upon chronic nephritis and, naturally, a great number of articles have been published on the subject. No attempt will be made to review this huge literature. Certain points I shall refer to and then give the methods which seem to me to be of use to the practitioner in the field.

Our knowledge of kidney diseases has been materially advanced in recent years by the study of the chemistry of the urine and of the blood. What has been called the non-protein nitrogen of the blood has received a great amount of at-

tention. It has been found, for example, that after the serum albumin and the serum globulin, the nitrogen protein, have been precipitated with alcohol, in the filtrate there are substances containing nitrogen which are not protein. Some of these are urea, uric acid, creatinin, and amino acids. The urea nitrogen composes the greatest part (usually about 85 per cent) and the non-protein nitrogen normally amounts to 25-40 mg. per 100 c.c. of blood. Studies of diseases in which the non-protein nitrogen has been increased, have led to a much better understanding of the function of the kidneys and to better treatment of the individual patient.

The pendulum swings from one important substance to another. Several years ago creatinin held the stage as the most important non-protein nitrogen constituent of the blood. It was said by one hospital worker at a large meeting, that if a doctor were treating a case of nephritis and did not estimate the creatinin in the blood at intervals, he was neglecting his patient. Such a man is at one end of the scale where, at the other end, is the man who rarely examines the urine chemically. Both have the wrong attitude. Only recently doubt was thrown upon the whole subject of creatinin by a bio-chemist who did not think the substance called creatinin was really creatinin.

Recently, Major has proposed that we give a nephritic a certain amount (0.5 gm.) of creatinin intravenously and estimate the increase in the urine in hourly specimens up to three hours. Normals increase the output up to three times the pre-injection amount. In chronic nephritis the increase is none, to 50 per cent of normal.

Then uric acid held the stage for awhile. We were told that estimation of uric acid in the blood was the only valuable procedure to inform us of the functional capacity of the kidney. One does not hear so much about that now. The total non-protein nitrogen estimation, however, has held its own as a helpful procedure in diagnosis, prognosis, and treatment.

Addis conceives that the proper method of determining the amount of functioning tissue is to load it to capacity and then see how it will act. As urea is the most important salt eliminated by the kidney, he gives urea by mouth with large quantities of water to insure a kidney secretion and measures the ratio—urea in one hour's urine: urea in 100 c.c. of blood—and considers this a measure of the amount of secreting tissue in the kidney. His method is as follows:

At 6 a. m. the patient slowly drinks about 1000 c.c. of water in which urea is dissolved. When the blood urea concentration is between 15 and 25 mg. per 100 c.c., 30 gm. urea are given. If the blood concentration is already

as high as 60 mg. of urea per 100 c.c., no urea need be taken. At intermediate blood urea levels appropriate quantities of urea are administered, so that when the first blood is collected it should have a concentration of between 60 and 90 mg. of urea per 100 c.c. At 7 a. m., and every hour thereafter until 11 a. m., the patient drinks two glasses of water. No breakfast is given. Urine is voided every hour, but at 9 a. m., the time at which urination is completed is noted to within thirty seconds, and at 10 a. m., 11 a. m., and 12 noon urine is passed directly into special bottles and the exact time noted. The patient must be instructed to make each voiding as complete as possible, and to take the time at the end, and not at the beginning of urination. Blood is obtained (from a vein) at the middle of each of the three hourly periods over which the urine is collected. The urea content of these urine and blood specimens must be estimated with a high degree of accuracy, for even small errors may markedly influence the ratio if they happen to be in opposite directions for the blood and for the urine. The average ratio is 50.4. Probably Addis is correct in his idea of the best method of determining kidney function, but it is quite obvious that such a test is impossible outside of an unusually well equipped hospital. Even then we have found that errors and difficulties in urea estimation of urine are so great that we cannot be sure of our figures. Until the test is greatly simplified it has a very limited value.

There is no doubt that all this intensive work has assisted us to a far better understanding of nephritis and has thus helped us to treat our cases upon a more intelligent basis. For research upon the kidney diseases in hospitals and large clinics it is valuable. To the man in practice, who takes care of sick people in their homes or in small hospitals, such elaborate studies are neither feasible nor necessary. It is absurd to say that we do not handle our cases properly because we do not use this or that man's method. We can be absolutely sure of one thing, viz.: that all cases of nephritis under his care are not studied in such detail as he describes in his published articles. Only a limited number are so treated and when the paper is published only an occasional case may have all the known examinations and tests made. It cheers me up considerably to know that this is true. If I do not have all the tests I have read about performed on my patients, I do not feel that I am grossly neglecting them. After all, we must treat the patient who has the disease. Too often, in the zeal to find out new facts about the disease, we forget that we are dealing with a human being.

Chronic nephritis is a very common disease. Mortality statistics for this disease in the United States for the last 10 years are as follows:

	Number	Rate per 100,000	Per Cent
1910	53,330	99.	6.6
1911	57,803	97.5	6.9
1912	62,267	103.	7.4
1913	65,106	102.9	7.3
1914	67,545	102.4	7.5
1915	70,000	104.7	7.8
1916	75,316	105.2	7.5
1917	80,912	107.4	7.6
1918	79,343	96.9	5.4
1919	75,005	88.1	6.8
1920	78,192	89.4	6.8

Travelers from rice-eating countries tell us that chronic nephritis is rare among the natives, but found in the usual proportion among the meat-eating foreigners. Eskimos, we are told, suffer little from chronic nephritis in their native habitat. More proof is needed for these observations. Taking all information which we have (much of which is conflicting) there still remains the fact that there are some features in our modern civilization which predispose to the conditions which lead to nephritis. Newburgh has produced chronic kidney lesions in rabbits by feeding high-protein diets and he has fed large amounts of beef protein to normal men and has found albumin and blood in the urine.

It may well be that the saving of young lives as the result of lessened infant mortality, typhoid fever mortality, and other preventive measures, has increased the number of persons who reach the age when chronic nephritis begins to manifest itself. The chronic degenerative diseases are today engaging the attention which they really deserve.

In the etiology a few points seem to me to be most important. Hereditary influences certainly play some role. In fact, lacking the peculiarly susceptible tissue transmitted by heredity, it is doubtful if the kidneys would be so damaged by infection, protein sensitization and the like, or be the seat of the gradual inflammatory process known as primary contracted kidney. Focal infection, the all-embracing mother of all causes of nearly all diseases nowadays, must be held to be responsible in some cases. Unfortunately, shrines have been set up everywhere to the little god, "focal infection," and, like the Israelites before the Golden Calf at the sound of the trumpet, all fall down and worship. Never mind; soon we shall have another little god to worship as the ultimate cause of all diseases. Nevertheless, we must recognize the important role which streptococcal throat infections play in the production of acute and chronic kidney lesions.

In order to treat patients in the best manner, there should be some classification of the nephritides. We must confess at the outset that there is no satisfactory classification. There have been many attempts, but without results satisfactory to both pathologists and clinicians. The kidney is an organ of somewhat complex

structure in which response to varying forms of irritation or local destruction produces different degrees of reaction. It is not so surprising that it is found impossible to file away the different clinical and pathological types into pigeonholes.

The old classification of chronic interstitial and chronic parenchymatous nephritis is still used and has some advantages from a clinical standpoint, but the pathologists now refuse to recognize any such terms. From their viewpoint they are quite correct. The lesions are not so simple. A useful classification proposed by Christian, of the chronic nephritides is:

1. Chronic nephritis.
  - (a) With edema.
  - (b) With vascular hypertension.
  - (c) Mixed or combined type.
2. Essential vascular hypertension progressing to chronic nephritis.
3. Renal arteriosclerosis progressing into chronic nephritis.

It is not my conception that groups 2 and 3 give rise to chronic nephritis clinically. From the pathologists' standpoint lesions are found in the glomeruli, tubules, and interstitial tissue which may not be distinguishable from those in cases of what were in life chronic nephritis. For us, however, it makes little difference what the morbid histology of the kidney might be, provided the kidney is functionally capable of carrying on its work. That seems to me to be the criterion for us who treat the patients. I have seen many small scarred kidneys in cases of generalized arteriosclerosis, which were functionally competent by all tests. I have also seen somewhat enlarged, firm kidneys in cases of essential hypertension in which there was considerable histological change, but which, during life, were quite competent to carry on their proper function.

The simplest classification for our purpose, it seems to me, is into two groups: the wet and the dry. Or to take Christian's group and modify them a little:

1. With edema.
2. Without edema and with vascular hypertension.
3. A combination of 1 and 2.

This third group is by far the least common. In fact, one might almost say that such mixed types are unusual.

There has always been the question raised in how far the chronic nephritides are the result of infection. For the "wet" group it has generally been admitted that infections such as scarlet fever, measles, etc., play a very definite role. In the "dry" group it has been held by some that there is a primary contracted kidney without infection. Bell and Hartzel<sup>1</sup>, after a careful study of glomerulonephritis, conclude categorically: "All forms of glomerulonephritis are due directly to bacterial invasion of the

glomeruli, and the various clinical and pathologic types depend on the degree and extent of the permanent glomerular injury." They also consider that "The progressive nature of chronic glomerulonephritis is apparently due, in part, to repeatedly acute exacerbations."

If we accept the conclusion that all cases are the result of bacterial invasion—usually streptococcal—we are brought face to face with the now common theory of chronic focal infection. Like all theories it has been ruined by the over-enthusiasm of its best friends. There can be no doubt that foci of infection in the body are directly responsible for some diseases, but it seems to me that we go to extremes when we ruthlessly tear out or cut out every conceivable organ which someone has said may be at fault, forgetting that many times we do our patients more harm than good. Many a patient has made the rounds of the specialties, in every one losing some part of his anatomy and some of his often very hard-earned cash, only to find that in the end he really is no better of his original disease.

I believe we should search diligently for any chronic infectious process which may have some relationship to the nephritis, let us say, but we should use judgment and prudence in advising removal of only suspicious conditions. Of the many infected tonsils, how few have nephritis? Of sinuses, of apical tooth abscesses, of gall bladder disease, etc., etc., how many have chronic nephritis? It is not the infection alone. There is a something which we have to call inherited constitution, which certainly plays an important part in determining the onset and course of a chronic nephritis.

To treat the chronic patient intelligently we should know much more about him, his environment, his habits—mental and physical, his heredity, his previous illnesses, than we usually do know.

The advances which have been made in recent years in the treatment of chronic nephritis have resulted from studies of the chemistry of the blood and of the ability of the kidneys to pass out certain dyes. Further interesting observations of great help in treatment have been the studies of the response of the kidneys to the food substances, salts and water which are brought to them for excretion.

Attempts to measure kidney function date back for a number of years, but Hedinger and Schlayer were among the first to study the problem systematically. They used a special diet and measured water output, nitrogen and salts. They also used substances intravenously, such as lactose, to test out the kidney function. Mosenthal modified their procedure, giving a fairly large meal containing protein, fat, carbohydrate, a weighed amount of sodium chloride, and 1750 c.c. of fluid to be divided and drunk only at meal time. He collected urine in two-

hourly specimens throughout the day and the 12-hour night period. For every specimen he measured the amount, specific gravity, NaCl and nitrogen. Inability of the kidney to concentrate salt and nitrogen, more or less fixation of specific gravity in the specimens and relation between intake and output were carefully noted. With this very elaborate and somewhat laborious series of procedures it was found that some kidneys showed rather striking and more or less uniform characteristics in the points noted above. It was impossible to study many cases so intensively and as time went on and more and more of us found that many patients, whose kidney function we wished to study could not eat the huge meal and, further, it seemed perfectly evident that some patients who were not in very good condition were actually harmed by so much protein as the diet contained. O'Hare also called attention to this feature in his work. He modified somewhat the test meal and used a method of added salt and urea with the two-hourly collection of urine during the day and 8 p. m. to 8 a. m. for the night. He gave 76 grams of protein, 127 grams of fat, 245 grams of carbohydrate, about 2,500 calories, 1,550 c.c. of fluids and 5.8 grams of salt. This is a big meal and many could not eat it. However, in thirty cases of chronic nephritis which he analyzed, water and salt seemed to obey the same laws of excretion, but water and nitrogen curves were not so closely parallel. The more severe the case the greater the lowered secretion of water, salt and nitrogen. Occasionally, in mild cases there was an apparent hypersensitiveness shown in the morning specimens. Fixation was to him the most important part of the test. He thinks the test is more delicate than the estimation of 'phthalein and non-protein nitrogen because in mild cases, when these are normal, the two-hourly test shows changes.

Mason later criticised the test meal technic, as it was too hard on the patient. He considered three important points:

1. Volume of night urine (this was emphasized by Mosenthal).
2. Variation in specific gravity throughout 24 hours.
3. Concentration of N in the night urine.

Lyle and Sharlit called attention to the extrarenal factors which influenced urinary output, such as temperature, humidity, psychic factors, and showed how, even in normal persons, night urine was at times greater than day urine.

An important criticism directed against all these methods is that they attempt to show response of the body to ingestion of protein and salt on the same day that the diet is given. In every study of metabolism it has been fundamental that the patient be on a standard diet for several days before, as well as during the

experimental period in order to be able to draw any conclusions approaching validity.

Then, too, the methods were not altogether applicable away from well-equipped laboratories. Some method was needed which could be carried out by any intelligent patient and attendant and be interpreted without the aid of elaborate laboratory equipment. The two-hourly method had been demonstrated to be the most useful and informative; simplification was needed to make it widely useful.

One other test will be taken up before we discuss the question of handling the patient and of using the two-hourly test mentioned above. The functional test with phenolsulphonephthalein has been of great value. It fairly well parallels the urea and creatinin or non-protein nitrogen accumulation in the blood in that, as the 'phthalein is decreased in the two-hourly test, the non-protein nitrogen increases. This relationship is constant enough to be of practical value and can be used by the practitioner in place of the more complicated blood chemistry tests.

Certain features of the 'phthalein test are of importance. First, it must be performed exactly according to instructions. Exactly 1 c.c. must be given into the muscles at a point free from edema, the urine must be collected at exactly one hour and ten minutes, and two hours and ten minutes following the injection. Water must be given in order to assure a urinary output. Not only is the actual two-hourly amount of importance, but the relationship between the first and second hour output has significance. Thus, in a series of normal persons, the amount excreted during the first hour is 70 to 95 per cent of the total two-hour excretion. Not only, then, is decreased function shown by a diminution of the total output, but also by the lag in output, making the second hour amount nearly equal to, or even greater than, the first hour amount.

Further, it has been shown by many authors that a characteristic of the "wet" type of nephritis is an increase in the plasma sodium chlorid and that sodium chlorid retention has some relationship to the edema. On the contrary, there is no salt retention in the "dry" form.

Of the three kinds of foodstuffs, protein, fat, and carbohydrate, only protein is known to damage the kidney. This has been shown at the University of Michigan by Newburgh, who has produced chronic kidney lesions in rabbits by high protein diets. Also, Squier and Newburgh have produced marked kidney irritation in normal men by large meat diet. I have mentioned above that many who were using the test meals containing seventy or more grams of protein felt the patients were often harmed. There seems to be good evidence that protein,

and particularly certain of the amino acids, irritate the kidneys profoundly.

One further recent series of observations should be mentioned, which have to do with the source of the anemia so common to all cases of chronic nephritis of long standing. Brown and Roth, in a clinical study of this subject, call attention to the fact that chronic nephritis is a constitutional disease; that, although the etiology is unknown, the unknown agent causes a widespread vascular change in which the vessels of the bone marrow are naturally affected. Thus, the anemia is only one of the results of the disease, due to diminished hematopoiesis of bone marrow. They also remark that this anemia has a prognostic value. With these conclusions, I think we can agree.

What practical application can be made from the recent work in the treatment of the patients we see in practice?

First let us take up prognosis. It is important to know the family record of the patient, how many of his ancestors died of kidney disease, and at what ages. Also, is his physical build that of the parent (grandparent) who had nephritis, or of that of the other parent? In some families the cases of chronic nephritis have died comparatively young. In general, the younger the parents at death, the worse the prognosis in the patient. Prognosis is worse in a young man with a bad heredity and no previous infectious disease, than in a young man with a good heredity who has had his nephritis develop as the result of some definite infection. However, we may lay down some very excellent rules upon the basis of the past experience of others, but nothing can supplant that indefinable something which tells the careful observer of long experience how the individual case will run its course.

In treatment there are rational measures which follow directly from what has been said above.

Diet is most important. Persons who have chronic nephritis have, as a rule, a capricious appetite and they must often be tempted to eat. The underlying principles are a low protein, moderately high fat and carbohydrate diet, water freely. The diet must include all the vitamines; in fact, the anti-scorbutic vitamines in oranges, grapefruit and lemons are absolutely essential for the maintenance of the appetite, to say nothing of their specific action. In the dry form salt may be given to taste. In the wet form the so-called salt-free diet is best. This contains about 2 gms. of NaCl inherent in the foodstuffs. Practically, then, a diet of 40-50 gms. of protein, 100-150 gms. of fat, 200-250 gms. carbohydrates, with a caloric value of 1,800—2,200 will keep anyone in caloric balance. There is no rigidity about these amounts except so far as the protein is concerned. I do not feel that it makes the

least bit of difference in what form the protein is given. The amino acid radicals are the kidney irritants and tyrosin and cystin seem to be especially irritating. Yet we must have tyrosin and cystin. Many stick to milk and its casein products for the proteins in the diet. There is no objection to this except the sameness. I am convinced that a varied diet is best for the patient.

After one has found out what the urine contains chemically and what the blood pressure is, and the degree of anemia, he now should follow the functional capacity of the kidneys. I can recommend several procedures which any practitioner can easily do. First is the test with the injection of phenolsulphophthalein. A simple and satisfactory colorimeter can be obtained and the test can be made according to the instructions found on the colorimeter.

There are two important features about the test. First, the total amount excreted in two hours; second, the relationship between the amount excreted within the first and second hour.

Thus, in a series of normal persons from 25 to 38 years of age, in no case was there less than a 2:1 ratio and it ran from there to a 10:1. In other words, the normal individual puts out the greater part of the dye during the first hour. A marked change in this relationship is often the first sign of functional disturbance. I believe that an excretion of 25 per cent the first hour and 5 per cent the second hour has nothing like the significance that 15 per cent for each hour has. The former may be normal, the latter certainly is abnormal. Not only the amount excreted, but evidence of delayed excretion has particular meaning for him who knows how to read.

One test establishes only a base line for the individual patient. The real value of the test lies in the comparison of readings made at intervals. Rarely one finds kidneys which, although evidently quite diseased, are yet hypermeable. No set of rules can be applied to such a case. It must be judged by itself when all available information is at hand. Normally, specific gravity varies with amount of fluid drunk and character of food. Practically, then, a test for function supplementing the 'phthalein test can and should be done as follows:

The patient is on the standard salt-free diet, with a known amount of added salt (5 grams), and total fluids, 1700 c.c. divided and taken with meals at 7 a. m., 12 noon, and 5 p. m. He remains on this for at least three days in order that the body may accommodate itself to the diet. Now, while remaining on the diet and not in any way changing his mode of living, urine is collected at two-hourly intervals from 7 a. m., to 7 p. m., and in one amount from 7 p. m. to 7 a. m. For example, beginning at 7 a. m., April 15, the patient voids just before

breakfast. This specimen is discarded. At 9, 11 a. m., 1, 3, 5, 7 p. m., he voids into separate vessels and labels them. All urine voided after 7 p. m., and including the 7 a. m. voiding on April 16, is the night specimen. The specific gravity of every specimen is then taken, with urines at the same temperature, (in other words, do not take specific gravity of one specimen just as it comes from the warm body and of another specimen after it has stood several hours in a cold room). The total 12-hour day is then determined by adding all the 7 a. m. to 7 p. m. specimens. Now we have the total intake of fluid, the total output in two amounts day and night, and the specific gravity of all specimens day and night. This same procedure is repeated for periods of three consecutive days from time to time. Now, normally (leaving out of account extrarenal factors mentioned within) the total intake should be greater than the total output by 300-400 c.c. The separate specimens of day urine should show considerable variation in specific gravity; the night specimen should show 1.015-1.020 specific gravity and the day urine should be two or three times the quantity of the night urine. Gross departures from these standards show that the kidney function is impaired. For example, in severe chronic nephritis of the dry form the specific gravity of all specimens is fixed at a low figure (1.006-1.008) and the night urine equals or exceeds the day urine. Ingestion of fluid at meals, which should cause slight diuresis at the next two-hourly specimen, fails to do so. With the 'phthalein and the two-hourly urine one can gain all the information needed to carry on a case intelligently. It is not essential to take the blood urea or creatinin or other non-protein substances. There are occasions when it helps to know the blood urea, but the blood urea can be pretty accurately guessed if one has the patient before him and he knows the 'phthalein output and the results of the two-hourly tests.

Treatment by drugs? Yes, but this is the least important part of treatment. With diet, exercise, baths, massage, and sunlight, drugs, except to manage accessory symptoms, seem to me to be quite unnecessary. The only drugs I ever use are mild laxatives and occasional refrigerant diuretics. Whether one should use such powerful diuretics as diuretin or theocin is debatable and I have as yet no convictions on that point. My only conviction is that the fewer drugs one uses, the better off his patient is. The only drug which seems to be helpful is iron in some form. Osler was very fond of Basham's mixture. The preparation of bone marrow and spleen extract recently advocated by Leake should be useful in cases where anemia is present.

In the uremia of the dry form no procedure in my hands has been as valuable as venesec-

tion of 400-800 c.c. of blood. Convulsions usually cease and the patient often becomes conscious and may live for several weeks, long enough to settle any affairs he might have neglected to settle for the protection of his family. I do not believe I have ever seen a case recover sufficiently to live for several months when uremic convulsions set in. Venesection is palliative, not curative. Following venesection intravenous or subcutaneous saline solution should be given. Transfusion of whole blood may also be performed.

In the uremic coma of the wet form venesection may also be performed, but the results are not as satisfactory as in the convulsive type of uremia. Sweat baths are highly recommended by some. I confess that I have long since given up this procedure, as I do not believe that it helps. This is a personal opinion. I have had better results by placing large mustard plasters over the kidney regions on the back. We have had some success by forcing fluids up to four liters a day in some cases. We hope to report this in detail at some future date.

In conclusion, I would not have you gain the impression that I deprecate the more elaborate chemical work on the blood as means of obtaining valuable information. Such is not my belief. However, I am firmly convinced that by proceeding as I have briefly outlined above, patients will receive the benefits of modern methods applicable only to the patient in a well-equipped and well-manned hospital.

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YOUR VIEWS  
ON  
MEDICAL SUBJECTS

# The Official Program of the 104th (59) Annual Meeting of the Michigan State Medical Society, Mt. Clemens, Mich., September 9, 10 and 11, 1924

## OFFICIAL CALL

The Michigan State Medical Society, the Council and the House of Delegates will convene in annual session in Mt. Clemens on September 9, 10 and 11, 1924, for the transaction of such business and scientific deliberation as may properly come before the Society and as provided by its Constitution and By-Laws.

J. B. JACKSON, Chairman of the Council.  
GUY L. CONNOR, President.

Attest: F. C. WARNSHUIS, Secretary.

## THE COUNCIL

September 9 Meeting—12 m. and 5 p. m.  
September 10 Meeting—12 m.  
September 11 Meeting—12 m.

J. B. Jackson, Chairman.

## SCHEDULE

### September 9, 1924

12:00 m.—Meeting of the Council.  
2:00 p. m.—House of Delegates.  
7:15 p. m.—House of Delegates.  
9:30 p. m.—Smoker.

### September 10, 1924

8:00 a. m.—House of Delegates.  
9:45 a. m.—First General Session.  
1:15 p. m.—Section Meetings.  
4:30 p. m.—Entertainment.  
7:15 p. m.—Second General Session.  
9:00 p. m.—President's Reception.

### September 11, 1924

8:00 a. m.—House of Delegates.  
9:00 a. m.—Section Meetings.  
1:15 p. m.—General Meeting of all the Scientific Sections.

## SECTION MEETINGS

### Scientific Section Programs

**NOTE:**—Chairmen will convene their Sections promptly on the hour designated. Members are requested to co-operate and avoid delay.

Papers presented before Sections become the property of the State Society and cannot be published in other Journals.

Manuscripts are to be typewritten, double spaced and are to be handed to Section Secretaries.

## GENERAL MEETING

### BIJOU THEATRE

September 10, 1924—9:45 A. M.

Guy L. Connor, Detroit, President

1. Call to Order.
2. Invocation: Rev. D. H. Ramsdell, D.D., Methodist Church, Mount Clemens.

3. Address of Welcome—E. G. Folsom, M. D., President Macomb County Medical Society.
4. Response—President Connor.
5. Announcements:
  - (a) Committee on Arrangements.
  - (b) House of Delegates.
6. President's Annual Address—Guy L. Connor, Detroit.
7. Address—"Science and Superstition."  
Prof. W. D. Henderson,  
University of Michigan.
8. Nominations for President.
9. Resolutions.
10. Adjournment.

## SECOND GENERAL SESSION

### BIJOU THEATRE

**TIME:** September 10th, 7:15 P. M.

1. Call to Order by the President.
2. Music—Vocal Solo.
3. "Our Hospital Obligations" (15 minutes).  
Geo. L. FeFevre, President State Board of Registration.
4. Address—"The Profession's Relations to the Public."  
William D. Haggard, President-elect American Medical Association, Nashville, Tenn.
5. President's Annual Reception. Park Hotel.

## THIRD GENERAL SESSION

### BIJOU THEATRE

**TIME:** September 11th, 1:15 P. M.

1. Call to Order.
2. Report from House of Delegates.
3. Introduction of President-elect.

### Scientific Program

(**NOTE:**—This afternoon's Session will be a Joint Meeting of all the Scientific Sections.)  
4. "General Infections by Bacteria."  
Emanuel Libman, M. D., New York City.

Presentation of Clinical Cases.

#### Discussants:

L. H. Warfield, Ann Arbor—General Medicine.  
R. R. Smith, Grand Rapids—Surgery.  
Don Campbell, Detroit—Ophthalmology and Oto-Laryngology.  
Reuben Petersen, Ann Arbor—Gynecology.  
Guy L. Kiefer, Detroit—Public Health.

## HOUSE OF DELEGATES

### METHODIST CHURCH

Carl Moll, Speaker, Flint.

J. E. King, Vice-Speaker, Detroit.

F. C. Warnshuis, Secretary, Grand Rapids.

## FIRST SESSION

**TIME:** September 9, 2:00 P. M.

## CREDENTIAL COMMITTEE

Henry Cook—Flint.

V. H. Wolfson—Mt. Clemens.

A. V. Wenger—Grand Rapids.

1. Call to Order and Roll Call.
2. Speaker's Address—Carl F. Moll, Flint.
3. President's Remarks—Guy L. Connor, Detroit.
4. Appointment of Business Committee.
5. Election of Nominating Committee.
6. Report of Committee on Revision of the Constitution and By-Laws.
- Chairman—J. G. R. Manwaring, M. D., Flint.
7. Recess.

### SECOND SESSION

*TIME: September 9, 7:15 P. M.*

1. Call to Order.
2. Annual Reports:
  - (a) The Council—J. B. Jackson, Kalamazoo.
  - (b) Committee on Tuberculosis—W. H. Marshall, Flint.
  - (c) Public Health—C. C. Slemons, Grand Rapids.
  - (d) Legislation—Hugh Stewart, Flint.
  - (e) Venereal Prophylaxis—A. P. Biddle, Detroit.
  - (f) Medical Education—B. D. Harrison, Detroit.
  - (g) Civic and Industrial Relations—Guy L. Kiefer, Detroit.
  - (h) Public Health Education—W. T. Dodge, Big Rapids.
  - (i) Delegates to American Medical Association.
3. New Business and Resolutions.
4. Adjournment.

**NOTE:**—Nominating Committee Duties—  
 (a) Nominate four (4) Vice-Presidents.  
 (b) Nominate Councillor to succeed Dr. W. H. Parks, 13th District, term expires.  
 (c) Three delegates to American Medical Association and four alternates.  
 (d) Nominate place for next Annual Meeting.  
 (e) Custodians of the Ballot Box for President.

### THIRD SESSION

*TIME: September 10, 8:00 A. M.*

1. Call to Order.
2. Reports of Business and Special Committees.
3. New Business.
4. Adjournment.

### FOURTH SESSION

*TIME: September 11, 8:00 A. M.*

1. Call to Order.
2. Reports of Committees.
3. Report of Nominating Committee.
4. Unfinished Business.
5. Adjournment.

### DELEGATES AND ALTERNATE

#### DELEGATES

#### HOUSE OF DELEGATES

**NOTE**—The blackface type that of the Delegates; the lightface type that of the alternates.

**ALPENA**—Branch No. 48

**C. M. Williams, Alpena.**  
**F. J. McDaniels, Alpena.**

**ANTRIM-CHARLEVOIX-EMMETT**  
 —Branch No. 41

**B. H. Vanleuven, Petoskey.**  
 Harry Shaver, Boyne City.

**BARRY**—Branch No. 26  
**BAY**—Branch No. 4

**E. C. Warren, Bay City.**  
**P. R. Urmston, Bay City.**  
 Mary Williams, Bay City.  
 C. A. Stewart, Bay City.

**BENZIE**—Branch No. 59  
**BERRIEN**—Branch No. 50

**Robert Henderson, Niles.**  
 A. A. Rosenberry, Benton Harbor.

**BRANCH**—Branch No. 9  
**CALHOUN**—Branch No. 1

**C. S. Gorsline, Battle Creek.**  
**Geo. A. Hafford, Albion.**  
 E. L. Parmeter, Albion.  
 W. L. Godfrey, Battle Creek.

**CASS**—Branch No. 36  
**CHEBOYGAN**—Branch No. 58  
**CHIPPEWA-LUCE-MACKINAW**  
 —Branch No. 35

**C. J. Ennis, Sault Ste. Marie.**  
 E. H. Webster, Sault Ste. Marie.

**CLINTON**—Branch No. 39

**Eugene Hart, St. Johns.**  
 E. A. McWilliams, Maple Rapids.

**DELTA**—Branch No. 38

**G. C. Bartley, Escanaba.**  
 A. F. Snyder, Escanaba.

**DICKINSON-IRON**—Branch No. 56  
**EATON**—Branch No. 10

**F. J. Knight, Charlotte.**  
 V. J. Rickerd, Charlotte.

**GENESEE**—Branch No. 24

H. Stewart, Flint.  
 J. Benson, Flint.  
 H. Cook, Flint.  
 M. S. Knapp, Flint.  
 D. Knapp, Flint.  
 J. G. R. Manwaring, Flint.

**GOGEBIC**—Branch No. 52  
**GRAND TRAVERSE-LEELANAU**  
 —Branch No. 18

**F. G. Swartz, Traverse City.**  
 E. B. Minor, Traverse City.

**GRATIO-T-ISABELLA-CLARE**  
 —Branch No. 25

**R. B. Smith, Alma.**  
 C. F. DuBois, Alma.

**HILLSDALE**—Branch No. 3

**T. H. E. Bell, Reading.**  
 W. A. Oliver, Camden.

**HOUGHTON**—Branch No. 7

**H. M. Joy, Calumet.**  
 G. A. Conrad, Mohawk.

**HURON**—Branch No. 47

**W. B. Holdship, Ubly.**  
**A. J. Howell, Bay Port.**  
 C. B. Morden, Bad Axe.  
 F. W. Wiley, Pigeon.

**INGHAM**—Branch No. 40

B. M. Davey, Lansing.  
 L. W. Toles, Lansing.  
 Oscar Bruegal, Lansing.  
 Fred Huntley, Lansing.

**IONIA-MONTCALM**—Branch No. 16  
**JACKSON**—Branch No. 27

John Smith, Jackson  
 G. C. Hicks, Jackson

**KALAMAZOO**—Branch No. 64

L. J. Crum, Kalamazoo.  
 W. Denbleyker, Kalamazoo.  
 C. A. Youngs, Kalamazoo.  
 C. L. Bennett, Kalamazoo.  
 C. Gillette, Kalamazoo.  
 L. E. Westcott, Gobles.

**KENT**—Branch No. 49  
**LAPEER**—Branch No. 23

W. J. Kay, Lapeer.

**LENAWEE**—Branch No. 51  
**MACOMB**—Branch No. 48  
**MANISTEE**—Branch No. 19

Harlan MacMullen, Manistee.

**MARQUETTE-ALGER**—Branch No. 28

A. W. Hornbogen, Marquette.  
 H. S. Smith, Ishpeming.

**MASON**—Branch No. 17  
**MECOSTA**—Branch No. 8

W. T. Dodge, Big Rapids.  
 J. B. Campbell, Big Rapids.

**MENOMINEE**—Branch No. 55  
**MIDLAND**—Branch No. 43

E. J. Dougher, Midland.  
 J. H. Sherk, Midland.

**MONROE**—Branch No. 15

C. T. Southworth, Monroe.  
 J. T. Siffer, Monroe.

**MUSKEGON**—Branch No. 61  
**NEWAYGO**—Branch No. 50  
**OAKLAND**—Branch No. 3

D. G. Castell, Pontiac.  
 Fred Baker, Pontiac.

**OCEANA**

A. R. Hayton, Shelby.  
 J. H. Nicholson, Hart.

**O. M. C. O. R. O.**—Branch No. 11

C. R. Keyport, Grayling.  
 A. C. MacKinnon, Atlanta.

**OSCEOLA-LAKE**—Branch No. 30  
**ONTONAGON**—Branch No. 66

E. J. Evans, Ontonagon.  
 F. W. McHugh, Ontonagon.  
 W. R. Hanna, Mass.  
 J. S. Nitterauer, Ontonagon.

**OTTAWA**—Branch No. 32

R. H. Nichols, Holland.  
 W. C. Kools, Holland.

**PRESQUE ISLE**—Branch No. 63  
**SAGINAW**—Branch No. 14

W. J. O'Reilly, Saginaw.  
 N. F. McClinton, Saginaw.

**SANILAC**—Branch No. 20

S. G. Tweedle, Sandusky.  
 John Campbell, Brown City.

**SCHOOLCRAFT**—Branch No. 57  
**SHIAWASSEE**—Branch No. 33

G. B. Wade, Laingsburg.  
 W. E. Ward, Owosso.

**ST. CLAIR**—Branch No. 45

A. J. McKenzie, Port Huron.  
 W. L. Callery, Port Huron.

**ST. JOSEPH**—Branch No. 29  
**TRI**—Branch No. 42

S. C. Moore, Cadillac.  
 W. J. Smith, Cadillac.

**TUSCOLA**—Branch No. 29**WASHTENAW**—Branch No. 42

H. D. Barss, Ypsilanti.  
 A. D. Wickett, Ann Arbor.  
 W. E. Forsythe, Ann Arbor.  
 M. E. Soller, Milan.  
 A. A. Palmer, Chelsea.  
 I. W. Greene, Ann Arbor.

**WAYNE**—Branch No. 2

J. A. Kimzey, Detroit.  
 R. C. Moehlig, Detroit.  
 H. A. Luce, Detroit.  
 R. L. Clark, Detroit.  
 J. H. Charters, Detroit.  
 E. G. Martin, Detroit.  
 Wm. Honor, Detroit.  
 Frank A. Kelly, Detroit.  
 C. D. Aaron, Detroit.  
 R. C. Andries, Detroit.  
 G. E. Frothingham, Detroit.  
 Harold Wilson, Detroit.  
 F. R. Starkey, Detroit.  
 J. H. Dempster, Detroit.  
 E. W. Caster, Detroit.  
 Chas. Kuhn, Detroit.  
 John N. Bell, Detroit.  
 H. W. Pierce, Detroit.  
 F. T. F. Stephenson, Detroit.  
 H. C. Carstens, Detroit.  
 Harry F. Dibble, Detroit.  
 Geo. J. Reberdy, Detroit.  
 C. Hollister Judd, Detroit.  
 Wm. J. Cassidy, Detroit.  
 Willias A. Potter, Detroit.  
 W. B. Wallace, Detroit.  
 W. D. Barrett, Detroit.  
 F. G. Buesser, Detroit.  
 H. W. Yates, Detroit.  
 Chas. S. Kennedy, Detroit.  
 E. W. Mooney, Detroit.  
 John B. Rieger, Detroit.  
 Stuart Wilson, Detroit.  
 Frank C. Witter, Detroit.  
 Don A. Cohoe, Detroit.  
 H. B. Garner, Detroit.  
 J. A. McGarvah, Detroit.  
 A. D. McAlpine, Detroit.  
 W. P. Woodworth, Detroit.  
 A. E. Catherwood, Detroit.  
 A. E. Vogelin, Detroit.  
 B. C. Lockwood, Detroit.  
 Angus McLean, Detroit.  
 G. M. Livingston, Detroit.  
 H. W. Hewitt, Detroit.  
 Geo. K. Sipe, Detroit.  
 L. I. Condit, Detroit.  
 G. C. Chene, Detroit.

## OPHTHALMOLOGY AND OTO-LARYNGOLOGY

*Chairman—Wm. G. Bird, M. D., Flint.  
Secretary—B. N. Colver, M. D., Battle Creek.*

### FIRST SESSION

BAPTIST CHURCH

September 9—9:00 A. M. to 12 M.

Dry Clinic, Harper Hospital, Detroit.

Under the direction of Dr. George E. Frothingham from twelve to fifteen selected cases will be presented by various men, giving the clinical history, the examination findings, the medical or surgical care, and indicating complications and end results, with the presentation of the patient. The various men who attend the First Session will lunch in Detroit immediately at the conclusion of the Clinic. Following the lunch, the members and guests will go by motor to the Masonic Country Club, sixteen miles north of Detroit, and four miles south of Mt. Clemens.

### SECOND SESSION

September 9—3 P. M. to 6 P. M.

Post-Graduate Lectures.

Masonic Country Club, Mt. Clemens, Michigan.

1. 3:00 to 3:40—"Etiology, Diagnosis and Management of Early Cataract."

Dr. Edward Jackson, Denver, Colo.

Synopsis: Our knowledge of the etiology of cataract is important, but fragmentary. Heredity, prenatal causes, poor general nutrition, trauma, eye strain, ocular inflammations, poisons and declining vitality of age, all share.

Diagnosis only begins with recognizing lens capacity. It includes exact kind, location, causation, the previous history of the eye, methods of eye work, the exact refraction, often changing at short intervals, the nutrition both general and ocular, the family history.

The management is just the opposite of telling the patient to wait for operation. Mostly operation never has to be considered. No patients need more regular and close supervision. Eyes must be watched for evidences of strain, inflammation and degenerative change. Quantity, kind, periods and conditions of eye work must be regulated. Glasses should be changed often enough to give the best possible help. Size of pupil must be controlled to give best vision. General health must be closely watched, especially intake of water, sugar tolerance and effects of focal infections. Patients must be seen and encouraged by evidence of retained vision; and if the case is progressive, familiarized with the thought of operation and the hope it offers of restored vision.

2. 3:45 to 4:25—"Demonstration of a New Portable Apparatus for Testing Air and Bone Conduction."

Dr. F. W. Kranz, Geneva, Ill.

Synopsis: Principal characteristics which may be investigated by physical measurements are the highest audible pitch, the lowest audible pitch, the minimum intensity for perception, the change in intensity or the change in pitch necessary for a discrimination in perception, the sensitivity of the ear as a function of pitch, and the minimum number of vibrations of any frequency necessary for the perception of a tone.

Until recent years, the tuning fork and the organ pipe have been the chief sources of tones available for experimental work, but the use of the vacuum tube electrical oscillator associated usually with a telephone receiver gives a source of sound unapproached by any other method in the possibilities of control of pitch and intensity.

Measurements of the absolute sensitivity of the ears of a number of presumably normal hearing people made with the use of a continuous tone range, showed in most cases, a considerable divergence between the sensitivities even of the two ears of a single individual. Changes in sensitivity with changes in pitch are very abrupt in some cases, one ear showing a change of 1000 in the necessary intensity for audition with a

change in pitch of less than a semi-tone. An instrument for the production of continuous tones from about 200 to 500 cycles per second, and with a wide range of available intensities in definitely graded steps, has been produced.

3. 4:35 to 5:15—"Diagnosis of Disease of the Nasal Sinuses" with lantern illustrations.

Dr. J. A. Cavanaugh, Chicago, Ill.

Synopsis: Anatomy in Children and Adults. Diagnosis of the various forms of sinus infections. The role and importance of X-ray as an aid in making the diagnosis.

4. 5:20 to 6:00—"Major and Minor Neuralgias of the Head," with lantern illustrations.

Dr. John F. Barnhill, Indianapolis, Ind.

Synopsis: Methods of and points in the diagnosis and differentiation of the varieties of neuralgias.

A brief discussion of the possible causes. The modern conception of the pathology. Methods of treatments. Drugs. Surgery and injection of the peripheral nerves. Deep alcoholic injections. The dangers and benefits of deep alcoholic injections.

Methods of injection. Choice of methods. Surgery of the ganglion—cutting the posterior root. The physiologic eirpiration of the ganglion. Results.

### SECTION DINNER—7:30 P. M.

Arrangements have been made for an informal Dinner at the Masonic Country Club. All members of the Section are urged to attend. This is an innovation in our Section, but we believe that it will be of great value from a social and recreational standpoint. The use of the golf course and of the bathing beach has been secured for those who wish to enjoy them. Any of the visiting ladies who wish to spend a part of either of the days of the meeting in Detroit, can get back and forth easily by interurban.

### GENERAL MEETING, OPENING SESSION, WEDNESDAY, SEPTEMBER 10, 9:45 A. M.

#### BIJOU THEATRE

All members of the Section are urged to be present at the General Meetings. No Section work is planned for the forenoon. Details of the Session program are given under the General Meeting.

### THIRD SESSION

September 10, 1:15 P. M. to 4:00 P. M.

Address of the President.

Report of Committees.

Naming of New Committees.

Election of Chairman, 1 year, Secretary for 2 years.

Round Table Discussion.

Under the direction of Dr. D. Emmett Welsh, Grand Rapids (Eye), and Dr. Charles H. Baker, Bay City, (Ear, Nose, Throat).

In accordance with the plan followed at the 1923 meeting at Grand Rapids, the discussion will be carried on so as to bring out as many practical points as possible, with the hope that the entire membership of the Section will enter into a lively, informal discussion. There will be no record kept for publication. The value of last year's experience meeting insures a good attendance and enthusiastic co-operation.

At this meeting opportunity will be given for the presentation of instruments and of pathological specimens.

General Meeting, Public Session .....	7:15 P. M.
President's Reception .....	9:00 P. M.
Details of these activities are given under the General Meeting.	

**FOURTH SESSION***Thursday, September 11, 9 A. M. to 12 M.***Election of Officers.****1. "Systemic Causes of Deafness."**Don M. Campbell, M. D., Detroit.  
John Carter, M. D., Detroit.**Synopsis:** The Systemic cause of aural pathology is not as clearly recognized as it is in the case of ophthalmologic pathology.

Of the various constitutional states tending to produce changes in the ear, syphilis is perhaps the most prominent.

This has become so apparent that the detection or exclusion of syphilis in aural pathology has become a routine matter.

Experience has shown that many cases of aural syphilis pass undetected, and also that the incidence of syphilis as an etiologic factor is so frequent as to make its consideration a matter of indispensable moment.

**Discussant:**

Ferris N. Smith, M. D., Grand Rapids, Mich.

**2. "Sinusitis a Reason for Apparent Failure Following Removal of Tonsils and Adenoids in Children."**

Dr. Roy A. Barlow, Madison, Wis.

**Synopsis:** The existence of sinuses in children is not universally recognized. A review of the embryology discloses their presence even during fetal life, and the fact that they attain greater size in early childhood is demonstrated by the accompanying lantern slides.

Young children are prone to infection which begins as a cold in the head. The existence of the infection is disguised by large tonsils and adenoids, especially since the symptoms are not referable to the sinuses themselves. The pathological condition is that of a low grade chronic infection. Removal of tonsils and adenoids accomplishes little toward the cure of the sinus disease and local medication is of no value.

The diagnosis is made by the history and x-ray plates. Results of surgical treatment are very satisfactory.

**Discussant:**

Dr. J. S. Wendel, Detroit.

**3. "Diagnosis of Foreign Bodies in the Bronchi and Lungs in Infants and Children," with lantern slide demonstration.**

Dr. Russell S. Rowland, Detroit.

**Synopsis:** The importance of the history, signs and symptoms as well as Roentgen Ray and endoscopic examination. Pathology; physical signs; newer development in Roentgen Ray examinations. The importance of early diagnosis in the treatment of these conditions.**Discussant:**

R. Bishop Canfield, M. D., Ann Arbor, Mich.

**4. "Problems in Laryngology."**

Dr. A. C. Furstenberg, Ann Arbor.

**Discussant:****5. "Irremovable Foreign Bodies in the Eye."**

Dr. Geo. Slocum, Ann Arbor.

**Synopsis:** Without surgical intervention foreign bodies in the eye are among the most serious of ocular injuries.

Symptoms and diagnosis of foreign bodies:

1. Presence.
2. Location.
3. Extent of laceration.
4. Size of foreign body.
5. Accompanying reaction.

**Classification:****I—Removable.**

1. Those situated in the aqueous chamber and generally removable.
2. Those situated wholly within the lens.
3. Those situated in the vitreous and generally removable because magnetic.
- (a) Seat of injury serious or laceration extensive.
- (b) Laceration moderate or slight, recent or late.
- (c) Removable but marked iridocyclitis already present.

**II—Irremovable.**

- I. Prognosis as to injured eye.
2. Management of different types.
  - (a) Non-magnetic.
  - (b) Those too large to remove without destructive laceration.
  - (c) Those enclosed in organized tissue.
  - (d) Seat of injury in the ciliary zone.
  - (e) Character of reaction not admitting of removal.
3. General principles of treatment of each type.

**Discussant:**

Dr. Edward Jackson, Denver Colo, (By invitation.)

**GENERAL MEETING  
CO-JOINT SECTION SESSION****BIJOU THEATRE***Thursday, Sept. 11, 1:15 to 4:30 P. M.***"General Infections by Bacteria."**

Dr. Emanuel Libman, New York City.

**Discussants:**

1. Dr. S. H. Warfield, (General Medicine.)
2. Dr. Richard Smith, (Surgery.)
3. Dr. Reuben Petersen, (Gynecology and Obstetrics.)
4. Dr. Don Campbell, (Ophthalmology and Oto-Laryngology.)
5. To be announced. (Pediatrics.)
6. Dr. Guy Kiefer, (Public Health.)

**SECTION ON SURGERY****Chairman—Henry J. Vandenberg, Gd. Rapids.****Secretary—A. C. Blakeley, Flint.****FIRST SESSION****PRESBYTERIAN CHURCH***September 10, 1924—1:15 P. M.***Chairman's Address.**

Henry J. Vanden Berg, Grand Rapids.

1:30 p. m.

**"Roentgen Ray Treatment of Thyrotoxicosis, with Report of Cases."**

Dr. C. D. Chapell, Flint, Mich.

A comparison of fifty cases treated by X-ray, some of which have been treated surgically and some medically, others by the Roentgen Ray.

**Discussants:**

Dr. L. R. Himelberger, Flint, Mich.

Dr. Hickey, Ann Arbor, Mich.

Dr. Louis M. Warfield, Ann Arbor, Mich.

Dr. Richard R. Smith, Grand Rapids, Mich.

2:00 p. m.

**"Studies in the Technique and Clinical Application of Sex Gland Transplantation."**

Dr. Max Thorek, Chicago, Ill.

**Discussants:**

Dr. A. W. Hornbogen, Marquette, Mich.

- Dr. A. F. Jennings, Detroit, Mich.  
 Dr. T. A. McGraw, Detroit, Mich.  
 2:30 p. m.  
 "Treatment of Cancer of the Large Intestine."  
 Dr. Walter E. Sistrunk, Rochester, Minn.  
 Discussants:  
 Dr. Max Ballin, Detroit, Mich.  
 Dr. John N. Bell, Detroit, Mich.  
 Dr. Louis J. Hirschman, Detroit, Mich.

**GENERAL MEETING, OPENING SESSION, WEDNESDAY, SEPTEMBER 10, 9:45 A. M.**

**BIJOU THEATRE**

All members of the Section are urged to be present at the General Meetings. No Section work is planned for the forenoon. Details of the Session program are given under the General Meeting.

**SECOND SESSION**

*September 11th—9:00 A. M.*

- Election of Chairman.  
 "Sterilization in the Feeble-Minded."  
 Dr. H. E. Randall, Flint, Mich.  
 Discussants:

Dr. C. D. Camp, Ann Arbor, Mich.  
 Dr. G. F. Inch, Kalamazoo, Mich.

9:30 a. m.

- "Hematogenous Staphylococcus Infections of Various Organs Arising from Infected Foci in the Skin."  
 Dr. D. B. Phemister, Chicago, Ill.

Synopsis: The most important normal habitat of the staphylococcus is the skin. It is present in most skin infections. Hematogenous infections in various organs and of varying degrees of severity arise from its entrance into the blood stream from the skin lesion. The relationship between the skin lesion and that in a distant organ or part is frequently overlooked. The establishment of a history of a preceding cutaneous infection is of assistance in the diagnosis of staphylococcus infections of various parts of the body.

Discussants:

Dr. Udo J. Wile, Ann Arbor, Mich.  
 Dr. Charles C. Jennings, Detroit, Mich.

10:00 a. m.

- "Etiology and Prevention of So-Called Catheter Cystitis."  
 Hugh Cabot, Ann Arbor, Mich.

Discussants:

Dr. H. W. Plaggemeyer, Detroit, Mich.  
 Dr. W. F. Martin, Battle Creek, Mich.

10:30 a. m.

- "The Surgical Treatment of Angina Pectoris."  
 Dr. Walter Vaughan, Detroit, Mich.

Discussants:

Dr. De Haas, Detroit, Mich.  
 Dr. J. G. R. Manwaring, Flint, Mich.  
 Dr. H. F. Collier, Ann Arbor, Mich.

11:00 a. m.

- "The Drive of Civilization, Disease and Decadence."  
 Jos. Rilus Eastman, Indianapolis, Ind.

Discussants:

Dr. A. W. Crane, Kalamazoo, Mich.  
 Dr. W. T. Dodge, Big Rapids, Mich.  
 Dr. J. H. Kellogg, Battle Creek, Mich.

**GENERAL MEETING  
CO-JOINT SECTION SESSION**

**BIJOU THEATRE**

*Thursday, Sept. 11, 1:15 to 4:30 P. M.*

- "General Infections by Bacteria."  
 Dr. Emanuel Libman, New York City.

Discussants:

1. Dr. S. H. Warfield, (General Medicine.)
2. Dr. Richard Smith, (Surgery.)
3. Dr. Reuben Petersen, (Gynecology and Obstetrics.)
4. Dr. Don Campbell, (Ophthalmology and Oto-Laryngology.)
5. To be announced. (Pediatrics.)
6. Dr. Guy Kiefer, (Public Health.)

**GENERAL MEDICINE**

**GERMAN EVANGELICAL CHURCH**

*Chairman—Bruce C. Lockwood, Detroit.*

*Secretary—Frank J. Sladen, Detroit.*

*September 10th—1:15 P. M.*

1. Chairman's Address.  
 "Thoughts on the Modern Methods of Diagnosis and Treatment of Digestive Diseases."  
 B. C. Lockwood, Detroit, Mich.
2. Subject to be announced.  
 E. L. Eggleston, Battle Creek, Mich.
3. "Lead Poisoning."  
 Douglas Donald, Detroit, Mich.
4. "Syphilis of the Lung."  
 C. F. Karshner, Grand Rapids, Mich.
5. "Resuscitation from Electrical Shock."  
 W. L. Finton, Jackson, Mich.
6. "Sympathectomy for Angina Pectoris."  
 A. F. Jennings, Detroit, Mich.
7. Subject to be announced.  
 Emanuel Libman, New York City.

*September 11th—9:00 A. M.*

8. "Digitalis, Its Uses and Abuses."  
 John L. Chester, Detroit, Mich.
9. "Hypothyroidism and Its Relationship to Chlorotic Anaemia."  
 L. M. Warfield and I. W. Greene, Ann Arbor.
10. "Chronic Alkalosis."  
 F. J. Sladen, Detroit, Mich.
11. "Clinical Significance of Jaundice."  
 M. A. Blankenhorn, Cleveland, Ohio.
12. "Hemolytic Jaundice."  
 C. D. Aaron, Detroit, Mich.
13. Subject to be announced.  
 A. W. Crane, Kalamazoo, Mich.

**GYNECOLOGY AND OBSTETRICS**

*Chairman—Walter Manton, Detroit.*

*Secretary—A. E. Catherwood, Detroit.*

**METHODIST CHURCH**

**FIRST SESSION**

*September 10—1:15 P. M.*

1. "Cancer of the Cervix. Treated with Heat and Starvation Ligature."  
 G. VanAmber Brown, Detroit, Mich.
- Synopsis: Carcinoma is more vulnerable to the application of heat than to any other known agent. The use of low degrees of heat is particularly applicable to the treatment of Carcinoma of the Cervix. The value of the heat treatment is enhanced by combining it with the "Starvation ligature." This is especially indicated in the so-called inoperable and incurable cases of cancer of the uterus.

2. "Further Study of the Use of the Phloridzin Test in the Early Diagnosis of Pregnancy." L. W. Hayes, Detroit, Mich.  
*Synopsis:* A discussion of the different results obtained by different workers with this test. The importance of a definite technique, and a summary of fifty cases.
3. Subject to be announced later. Miles F. Porter, Jr., Detroit, Mich.

General Meeting, Public Session .....	7:15 P. M.
President's Reception .....	9:00 P. M.
Details of these activities are given under the General Meeting.	

#### SECOND SESSION

Election of Chairman.

*September 11th—9:00 A. M.*

1. "The Bony Pelvis of American Colored Women." R. W. Alles, Detroit, Mich.  
*Synopsis:* The comparison of the measurements of such pelvis with those of the average white woman. The potential insufficiency of such pelvis during childbirth.
2. "Some Problems in Gynoplastic Surgery." Alexander M. Campbell, Grand Rapids, Mich.  
*Synopsis:* There is a need of a more intimate knowledge of the anatomy of the pelvic fascia and the muscles of the pelvic floor. Demonstration of a dissected female pelvis. Surgical management of Cystocele and Rectocele. Lantern slides demonstration.
3. "The Management of Second Stage of Labor." Robert B. Kennedy, Detroit, Mich.  
*Synopsis:* The diagnosis of beginning of second stage. Indications for operative proceedings. Indications for forceps. Application of forceps and advantages of the different types. "Prophylactic Forceps." Indications for episiotomy and method of repair. Lantern slides demonstration.

#### PUBLIC HEALTH

##### BASEMENT BAPTIST CHURCH

*Chairman—W. DeKleine, Saginaw.*  
*Secretary—R. C. Stephenson, Flint.*

#### FIRST SESSION

*September 10th—1:15 P. M.*

- Dr. Abraham Zingher, Assistant Director, Research Laboratory, New York City Department of Health, and Assistant Professor of Hygiene, New York University and Bellevue Hospital Medical College, will give a two-hour illustrated, informal lecture-clinic on
- "The Control and Prevention of Scarlet Fever and Diphtheria, including the Practical Demonstration of Dick and Schick Tests on School Children."

This clinic is of special importance to physicians, since an antitoxin for scarlet fever will soon be on the market.

#### SECOND SESSION

Election of Chairman.

*September 11th—9:00 A. M.*

1. Chairman's Address: "The Health Officer's Objective." William DeKleine, Saginaw, Mich.
2. "Trend of Health Education Among School Children." Mary Chayer, R. N., Saginaw, Mich.
3. "A Method for the Prevention of Communicable Diseases Among School Children." R. C. McHaney, Owosso, Mich.

4. "The Practical Application of Mental Hygiene." A. Adams Jacoby, Detroit, Mich.

#### PEDIATRICS

##### BASEMENT PRESBYTERIAN CHURCH

*Chairman—F. J. Larned, Grand Rapids.*  
*Secretary—R. M. Kempton, Saginaw.*

#### FIRST SESSION

*September 10—1:15 P. M.*

1. "Infantile Tetany with Report of Case." Edwin P. Russell, Ann Arbor, Mich.
2. "Adolescent Rickets with Report of Case." David J. Levy, Detroit, Mich.
3. "Human Milk: Factors Which Affect Its Production." B. Raymond Hoobler, Detroit, Mich.
4. "The Value of Quartz Light Therapy in Pediatrics." J. P. Parsons, Ann Arbor, Mich.
5. "Remarks on Infant Feeding." Walter H. O. Hoffman, Chicago, Ill.

#### SECOND SESSION

Election of Chairman.

*September 11—9:00 A. M.*

1. Intra-Cranial Hemorrhage in the New-Born." T. D. Gordon, Grand Rapids, Mich.
2. "Treatment of Pneumonia." Russell S. Rowland, Detroit, Mich.
3. "Some X-Ray Studies in Rickets." Preston M. Hickey, Ann Arbor, Mich.
4. "Dental Problems of Childhood from the Pediatric's Standpoint." Lafon Jones, Flint, Mich.
  - (a) Discussion opened by Dr. Russell Bunting, Dental College, University of Michigan.
  - (b) Discussion continued by Dr. J. Orton Goodsell, Saginaw, Mich.
5. "Pulmonary Tuberculosis in Childhood." Albert J. Bell, Cincinnati, Ohio.
6. Business Session and Election of Chairman.

#### REGISTRATION

The Registration Booth will be found in the Gymnasium. Every member is urged to register shortly after his arrival and receive a copy of the official program, badge, and entertainment announcements. Members will find the commercial exhibits also located in the Gymnasium.

#### INFORMATION

The House of Delegates will meet in the Methodist Church, next to the Gymnasium. Section Meetings will convene in the Churches noted at the head of each Section's program.

The General Meetings and the Combined Section Meeting on Thursday afternoon will be held in the Bijou Theatre.

Every member is requested to register at the Registration Booth in the Gymnasium.

A splendid assortment of exhibits will be found in the Gymnasium.

Delegates' credentials have been mailed to each Delegate. They are to be presented to the Credential Committee in the House of Delegates and not at the Registration Booth.

General Meetings and all Section Meetings will be started promptly at the time designated. Please remember this and be prompt in your arrival at meeting places.

# The Journal

OF THE

## Michigan State Medical Society

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

## PUBLICATION COMMITTEE

R. C. Stone, Chairman.....	Battle Creek
B. R. Corbus.....	Grand Rapids
J. D. Bruce.....	Saginaw

## Editor and Business Manager

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Grand Rapids, Mich.

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The Society does not hold itself responsible for opinions expressed in original papers, discussions, communications, or advertisements.

**Subscription Price—\$5 per year, in advance**

SEPTEMBER, 1924

Report Malpractice Threats Immediately to Doctor F. B. Tibbals, 1212 Kresge Building, Detroit, Michigan.

### Editorials

#### OUR ANNUAL MEETING

In this issue there will be found the completed program for our Annual Meeting in Mount Clemens on September 9, 10 and 11. We urge every member to read this program. Having done so, we feel certain you will want to attend this meeting. Therefore we recommend that you commence formulating your plans and arrange your engagements so as to participate in the activities of this meeting.

To DELEGATES: You are the official representatives of the members of your County Society. You constitute the legislative body of our Society. To you there is entrusted the formulation of the policies and activities of our State organization. This is not an idle responsibility or an empty honor. Especially is this true this year when a new Constitution and By-laws are to be acted upon. Your local members rightly expect that you will attend all the sessions of the House of Delegates. It is extremely important that you be present at the first meeting, September 9, at 2 p. m.

*Invited Guests*—Among the several invited guests who will be present we call especial attention to our good fortune in being able to se-

cure Dr. W. D. Haggard of Nashville, Tenn., President-elect of the American Medical Association. Dr. Haggard will address us at the General Meeting on Wednesday evening, September 10. His subject will be, "The Profession's Relation to the Public." Dr. Haggard is an able speaker, a man of exceptional personality and a keen student. His address will be the outstanding feature of our meeting.

*Combined Sectional Meetings*—On Thursday afternoon at 1:15 p. m., the six Scientific Sections will hold a combined meeting in the Bijou Theater. The able clinician from New York will give a clinical lecture and demonstration. The selected representative of each Section will participate in the demonstration and discussion. We are certain that this combined meeting will prove to be most profitable and interesting. The theater seats 1,000 persons. It should be taxed to its capacity.

*Entertainment*—Macomb County physicians have planned pleasing entertainment for you during the leisure hours. A smoker, a reception and a "Flying Circus" on Selfridge Flying Field are the headliners.

Again we urge that you plan to be in attendance. It is a meeting that you can ill afford to miss. Attendance will redound to the benefit of yourself and of your patients.

#### IMPOSING INSURANCE COMPANIES

Practically every physician receives from one to a dozen letters each year from a life insurance company or its medical department that reads:

"John Doe has made application for life insurance. He reports that you attended him during an illness in 1923, (or that you operated on him). Will you please send me a complete report of that illness (or operation) in order that he may be issued a policy."

Not a "thank you," or "we will pay" in any of these requests. Just a brazen, imposing request that is made of the attending physician or surgeon. Why tolerate it, or why let them get away with it? Our customary procedure is to consign such request to the waste basket. We recommend that every member do likewise. Why?

First, because you are being imposed upon. The company is endeavoring to secure information on a prospective policy risk free. It wants to secure this information in order to determine whether the applicant is a safe risk. It wants to avoid financial loss and wants your services as an assistant appraiser free of charge. The company desires to take advantage of your information and opinion for its personal gain without paying for such knowledge or advice. That's why it is an imposition on you, Doctor.

So long as you fall for this type of grafting, just so long will they continue to impose upon you and laugh up their sleeves at "Easy Mark"

Doctors." Our experience has been that when they really desire this information they will pay for it when pay is demanded, and that the applicant will not be denied insurance because you do not comply with their imposing request. Terminate today compliance with requests for services and opinions from insurance companies unless you receive payment for the services you render. Cease being an "easy mark."

#### THE PROBLEM OF MENTAL INFERIORITY

The spirit of modern medicine is the spirit of scientific investigation and its purpose is service to humanity. Therefore no material facts proffered by fellow workmen, of utility to promote welfare of mankind, can be rejected without careful examination.

Dr. Thomas Salmon, in his address at the opening session of the College of Physicians and Surgeons, Columbia University (Columbia University Press, 1924), points out that "Few physicians are aware that one person in ten in this state (New York) is admitted to a mental hospital before he dies, or that the number of beds in public hospitals for the insane in this country equals those occupied by all other sick persons combined." But "even the names and chief characteristics of its most common forms are less well known to many well educated physicians than are those of rare tropical diseases." "Public opinion and the law recognize mental disease as a medical problem and almost invariably the physician is first appealed to when it appears in a family, but he is usually not only quick to admit his lack of information regarding the questions of prognosis and treatment about which the distressed family of the patient are anxiously inquiring, but will often acknowledge to a colleague his profound lack of interest in everything that pertains to them."

Mental states constitute a medical problem, having many points of contact with those occupying the attention of the general physician. Ideas not only determine the actions of the body as a whole, as expressed in social conduct; ideas also influence the activities of individual organs and these states called, psychoneurosis by physicians and 'nervousness,' 'neurasthenia,' etc., by the laity, are far too wide-spread and their possessors make far too insistent demands from the general medical profession to permit them to be ignored as insanity has been. Recently Dr. William J. Mayo (quoted by Salmon), said, "Neurasthenia, psychasthenia, hysteria and allied neurosis are the causes of more human misery than tuberculosis or cancer. It is easy to see why scientific medicine finds itself confronted by a dilemma in having to deal with such a great mass of illness as that constituted by the psychoneuroses and at the

same time to preserve its aloofness toward all problems of mind in relation to disease. Several compromises have resulted. By one of these compromises the disorder is forcibly transformed into one of the fairly well understood forms of physical disease, and the mental symptoms considered as incidental and relegated to the background. Just what form of physical disease the psychoneurosis is transformed into depends upon the direction of medical interest at the time. Uterine displacements, impacted molars and endocrine disorders have all served their turn. In this transformation, the patients' anxiety regarding their general health and the frequency with which their compulsive thinking fixes their attention upon the functioning of their organs help materially. The physician is enabled to ignore the fact that the bodily symptoms so dramatically presented are mostly symbolic and is at liberty to treat them as if they were real. A colleague told me once that he curretted an old lady who had the delusion that she was pregnant, hoping thus to rid her mind of something she thought was in her uterus. This is an extreme example, perhaps, but the most amazing situations develop every day as the result of the general medical acceptance of physical life as the most convenient field of battle in dealing with the psychoneurosis. Two factors bid fair soon to dispose of this compromise, without the necessity of any deeper medical interest in mind than exists at present. One is the fact that hosts of quacks are prepared to conduct proceedings at this level much more successfully than the physicians. These competitors of ours are not greatly troubled by qualms of conscience, for forcing facts to meet situations in their daily task. Besides, they have not the underlying impatience with the psychoneurotic and his difficulties that handicaps the physician and, despite his efforts to conceal it, frequently interferes with professional relations. Remunerative patients with functional disorders are just as welcome to the quack as those with organic ones—perhaps more so. The other factor that must effectually modify the prevailing medical attitude toward the psychoneurotic and his woes is the element of time. The increasing shortage of physicians and increasing pressure upon scientifically trained practitioners will some day convince the profession generally of the tremendous economic waste involved in permitting itself to become a subsidized audience for the great dramatization of disease that the psychoneurosis constitute."

One of the reasons why scientific medicine chooses to ignore at the present time those nervous disorders is due to the decline of scientific interest in function not related to structure. No more brilliant chapter exists in medicine than that which records the work that provided our present knowledge of the

brain and spinal cord localization, but the emotions associated with instinctive activities and our knowledge of functions grouped under the concept of intelligence remain practically unchanged. A patient comes to us with a morbid fear. For all practical purposes it is the most important thing in his life. It profoundly acts on his relations, physiological, family and social. It may result in his death, by suicide, as surely as carcinoma could. We must regard that fear as a medical fact, although we are utterly unable in the present state of knowledge to correlate it with any structural change in any organ or system of organs and we cannot explain its existence as anatomical, physiological or biochemical terms. But another branch of investigation, psychopathology throws light upon the origin of that fear. It also provides means for its management so that it can be effectively and permanently removed. This would seem to be a creditable medical achievement, but, notwithstanding the fact that the patient came to the physician for aid, scientific medicine today seems coldly aloof from everything connected with it. "If it is unscientific or non-medical to employ suggestion, mental analysis, education in the psychology of the emotions, or social readjustment in treating these cases then this field must be formally abandoned by trained, scientific physicians or the medical profession, with blind dogmatism, continue to insist upon their forcing psychological issues into physiological ones, regardless of the facts."

Of course, it must be remembered that hundreds of individual physicians, and some of them the greatest leaders in the medical profession, are intensely interested in the neurobiological aspects of medicine. The discovery of regulating mechanisms that enable systems of organs to act in harmony with other systems shows that the minute study of a single organ is inadequate to explain even its own functions, much less the part it plays in the life of the organism as a whole. The broad neuro-biological attitude that Sherrington expresses in his book on the "Integrity of the Nervous System" and the work of Pavlov, Cannon and others who show the demonstrable effects of ideas on the functions of organs, will perhaps level the barrier which now seems to exist between physicians and the study of the psychoneurosis.

It is not difficult to understand how this barrier arose. The brilliant discoveries in cellular pathology focused attention on structural change, the ruins left by the fire; gradually the laboratory and the test tube replaced the careful study of the symptoms of disease, the study of functional disability.

The doctor of another generation was the intimate friend, the confidant of the hopes and fears of his patient. This relationship seems

to have passed, not by force of circumstances, but more likely because the public realized the changed attitude of the physician.

A new era in medical education will train physicians to make practical use of the scientific studies in neuro-biology and to treat the patient as a living, thinking human being.

C. D. Camp.

### THE JOURNAL

The demands of our individual practices consume the majority of our time. We forget information that has been imparted. We are inclined to give but little heed to the activities of our Medical Societies. We are lax in our support and prefer to "Let George Do It."

Sooner or later an occasion arises wherein our individual interests become involved. We jerk up with a start and wonder what has been going on. We rake our memories in vain and interrogate as to why this or that has happened. We promptly make the inquiry as to why this incident has not been provided against and learn to our surprise that definite steps and action has been taken, only we passed it by in our period of indifference. The same is true as to our attitude to The Journal. We may read it, possibly a hasty glance, or we may simply toss it on the accumulating pile of Journals in our office. We miss each month many important papers, reports and records of organizational activity. Then we wonder as to what value is The Journal.

To refresh your memory, to bring you back to things present, to possibly create a reawakening, we believe it timely to once more supply you with some pertinent facts.

1. The Journal is issued monthly and every member not in arrears is entitled to receive a copy of each issue.

2. The Journal expense is defrayed by the \$2.00 it receives from your annual dues and the revenue derived from its advertising pages.

3. The editorial policy is formulated and supervised by the Council through its Publication Committee and applied by the Editor.

4. Original articles are obtained from essayists who appear on the Annual Meeting program and from contributions that are approved and accepted by the Publication Committee.

5. Case reports, comments, editorials correspondence and news items are solicited from our members, the purpose being to provide an open forum for all our members, a forum which the Council and Editor urge our members to avail themselves of.

6. In so far as possible the Editor endeavors to keep the members enlightened and informed upon medical progress and events.

7. State policies are announced and support is solicited as occasions and events jus-

tify or render imperative organizational and co-operative activity.

8. Local and District Society Meetings and achievements are reported for the sake of record and to inspire all sister societies which comprise our State organization.

The foregoing is the policy, object, activity and function of your Journal. The Council, Publication Committee and Editor cannot attain these ends, in their fullest measure, single handed. The combined membership assistance is requisite. To that end is your co-operation, interest and loyalty solicited. Will you not contribute this assistance? Cause the Journal to be *your* Journal and contribute to it your support.

#### UNREASONABLE TAXATION

Through methods characteristic of conniving politicians an enactment, rider, joker, or whatever else you may please to call it, was passed by the last legislature that requires incorporate organizations not incorporated for profit to file a tri-annual report with the Secretary of State. For the privilege of doing so you pay a fee of \$10.00 and a filing fee of \$2.00.

Under this requirement, Literary Societies, Clubs, Debating Societies, Camera Clubs, County Medical Societies, etc., not incorporated for profit, must make returns and pay the tax of \$12.00. If your County Society is incorporated it is incumbent for you to make a return.

Words are not printable to give impression or opinion of such legislation or proponent of such an endeavor to cause to be paid into the State treasury added dollars for politicians to spend and play with. It is just such exhibitions of tax impositions that will terminate in a state-wide house cleaning. May it start at the coming primaries and fall election. Get busy, Doctor, and down the perpetual candidate who has been misrepresenting you.

#### LEGISLATION

There is no question but what representatives of cult practices are aggressively engaged in building political fences for the purpose of enlisting support for legislative enactments that they intend asking for at the coming session of the legislature. They are blacklisting certain candidates and to others they are promising votes anywhere from 1,000 to 5,000. They have blacklisted two candidates for lieutenant-governor and have this to say in their letters regarding the candidacy of Dr. Hugh Stewart of Flint:

"George W. Welsh of Grand Rapids is a candidate for the nomination for lieutenant-governor. Dr. Stuart of Flint is his principal opponent. The medical forces are solid behind Stuart. Welsh will see that the chiropractors have a fair chance. Which do

you want? Welsh, of course. If Stuart wins there is no need of introducing a chiropractor bill. So now is the time to take a hand."

We do not purpose entering into a political discussion. We are not urging any counter-movement to the "Cultists' activities." What we do urge is that every doctor ascertain the merit of their local candidates and whether they are pledged to a movement that will open the doors for an inrush of pseudo-doctors. Our position is that the people of this State must be protected and that no individual shall be permitted to engage in the relieving of the sick until he can enter the scientific gate of medical training. That no individual who, with little or no literary education and only a ninety-day or even two years of manipulative instruction, shall be permitted to sell his ignorance to an unenlightened people. To that end do we recommend that you assure yourself of the position of candidates who seek your support and vote.

#### PROPOSED NEW CONSTITUTION

We desire once more to call to the attention of County Societies and members the proposed new Constitution and By-laws that will be presented for adoption by the House of Delegates at its first session in Mount Clemens at 2:00 p. m. on September 9th. The report of the Special Committee, of which Dr. Manwaring of Flint, is Chairman, has been published in The Journal. We urge again that each Delegate carefully study all the provisions and ascertain the wishes of the members of his County Society in order that he may reflect their desires when the House of Delegates considers this important report.

#### *Editorial Comments*

For some time we have been considering a comment upon the amount of the annual salaries paid by State hospitals, corporation hospitals and sanatoria to resident physicians. Every week the Journal of the American Medical Association contains several advertisements from this type of hospitals seeking to secure the services of a physician for full time work in their institutions. The salaries mentioned usually range from \$600 to \$900 per year, with an occasional exception of a \$1,000 or \$1,200 remuneration cited. Board, room and laundry may or may not be included. We decry this penuriousness on the part of national, State and County officials, as well as the attitude of some of the medical men acting as superintendents of these hospitals. We are not referring to interne service. Our reference pertains to the quest for physicians for these hospitals, and who are required to have served their internship in an accredited hospital.

A young lady or man can attend a business college for six months or a year, become a stenographer, and go out and seek a position. She will demand and obtain a salary of \$20 to \$30 per week; five days and a half work a week with Saturday afternoon, Sundays and holidays off. A yearly salary of \$960 to \$1,500

and even more a year. Of course, she pays board and room, but her net earning each year is greater than the resident doctor who is expected to be on call at all hours, day or night.

A nurse will serve in a training school for 30 or 36 months with an admittance requirement of a high school diploma. On graduation she goes on private duty at \$7 per day. Grant she works only 10 months in a year—a total of \$2,100, and she only pays room rent and laundry; the patient paying her board during her ten months' duty. Or, if she goes in for hospital work as a floor supervisor or operating room supervisor she will command from \$60 to \$125 per month—\$720 to \$1,500 a year with room, board and laundry.

A politician will get a job of some kind as a department head or purchasing agent and command a salary of \$1,800 to \$3,000 per year, with little or no educational requirements.

These illustrations can be enlarged upon revealing the discrimination in remuneration given by these public and corporate hospitals. The resident physician who must spend from 10 to 12 years in preparation and study, is on call twenty-four hours a day and must be a highly trained individual, is remunerated for his time, skill and ability at the rate of \$50, \$75 or possibly \$150.00 per month. Less than what is paid the stenographer, nurse or civil employee whose fitness can be attained in from six to thirty-six months. We feel certain that any fair-minded individual, tax payer or politician will acknowledge this to be an imposition and an injustice.

Yes, the doctors are in part to blame. They have failed to demand fair and adequate remuneration. The rate is the same as it was twenty-five years ago. The time is at hand to demand a just increase. As aid in accomplishing this, Medical Journals should refuse to accept ads from such institutions who miserly seek to secure medical services at a 75 per cent discount. Labor demands a high remuneration for its services. Doctors should do likewise when laboring in civic or corporation hospitals.

Those members of County and State Societies who do not attend the scientific sessions of their organizations miss an annual opportunity for post-graduate instruction no other country can give and those who fail to read their medical journals are depriving themselves of a liberal medical education. Think this over.

Those who participate in State Societies; in its politics, with prepared papers and in discussions, are, or soon become, known as their profession's leaders.

Politics is the breath of life to a State Medical Society. Officers who are elected without a struggle from their friends will neither appreciate the honor nor work for the Society. The perpetuation in office of social cliques is vicious and not medical politics in its truest sense.

The movement on the part of the Grange and rural as well as labor representatives to carry the referendum which seeks to establish a state income tax should be defeated. The referendum proposes to tax all incomes over \$4,000, and to do away with the property tax. This would put the burden of taxation upon a very small proportion of our citizens and would relieve from taxation a large majority of our Michigan inhabitants. It would especially impose upon doctors, for as far as we know the proposed deductions would not permit him to deduct all the expenses of his practice. This is but another evidence, doctor, that you should become actively interested in the coming election and also why you should not only

vote but also exercise your influence to cause your friends to vote intelligently.

Delegates credentials have been mailed to every County Secretary. Delegates should secure their credentials from their local secretary and present them to the Credentials Committee of the House of Delegates. This is imperative to gain your seat and right to vote in the House of Delegates. The Credentials Committee has been appointed by Speaker Moll and they will be ready to pass on your credentials at 1 p. m., September 9th, one hour before the first session of the House is called to order. Don't fail to bring your credentials.

Entertainment features of the Mt. Clemens meeting will be announced at the first General Session.

In our correspondence column will be found an announcement and invitation to Michigan doctors from the Indiana State Medical Society regarding its Annual Meeting in Indianapolis on September 24-26. Our sister association has prepared a most interesting program with an array of notable and famed speakers who are recognized authorities in their respective specialties. Indiana is instituting an innovation in this year's scientific program by having it presented by such an "all star" cast. We shall be interested in the result. Section officers have been confronted with the problem of solving what is the best type of program that will create the greatest amount of interest. Opinions differ—some favoring home talent, others expressing preference for "stars." As a result each year's attendance is at such variance that a positive conclusion cannot be voiced. It is therefore fortunate that we can profit by Indiana's experience in planning our future programs. We trust that a goodly number of Michigan men will find it possible to attend the Indianapolis meeting and report their impressions to our Section officers.

We are 100 per cent for President Coolidge, his Secretary of War and their plan for a general Mobilization Day on September 12. The cheap, petty cry that is being raised in opposition by pacifists, bolsheviks and politicians of the Bryan-LaFollette type, and a few fanatic preachers is contemptible and almost traitorous. Preparedness is a desirable asset for our nation. A plan of mobilization is imperative. To know how soon, in the event of an emergency, we can mobilize our military forces, is extremely important. To actually check up and perfect details of prompt mobilization is a commendable precaution for our Washington officials to take. To know what can be accomplished should cause a feeling of contentment for every loyal citizen. We trust our members, both in and out of the Reserves, will aid in carrying out the mobilization plans and that in addition they will refute the ranting of disloyal individuals who are against perfecting a plan that is wholly in the interests of public welfare and safety.

We congratulate Dr. Haines and the University Hospital upon his election to the directorship of that institution. Dr. Haines has made a splendid record at Lapeer and has commendably demonstrated his administrative abilities during the time that he was at the head of the Lapeer Home. He possesses the respect and confidence of the people and profession of our State. As director of the University Hospital we feel confident that he will increase the esteem in which he is held and at the same time exemplify an administrative policy that will contribute to the people and the profession a handsome dividend of that hospital's value to the people of Michigan. His

selection as director will also materially increase the clinical features of the medical department of the University. No better selection could have been made. We feel certain that all our members are pleased by reason of Dr. Haines' election.

## *Correspondence*

### INVITATION FROM THE INDIANA STATE MEDICAL ASSOCIATION

August 1, 1924.

To the Editor of The Journal of the Michigan State Medical Society:

The Annual Session of the Indiana State Medical Association will be held in Indianapolis, Wednesday, Thursday and Friday, September 24th, 25th and 26th, 1924.

Some of the most noted clinicians and teachers in the United States have accepted places on the program. Among these are the following: William J. Mayo, Rochester, Minn.; W. A. Pusey, Chicago, Ill.; Edward Jackson, Denver, Colo.; Hugh T. Patrick, Chicago, Ill.; Ross Hall Skillern, Philadelphia, Pa.; Joseph C. Beck, Chicago, Ill.; Evarts A. Graham, St. Louis, Mo.; Kellogg Speed, Chicago, Ill.; Andre Crotti, Columbus, Ohio; Bransford Lewis, St. Louis, Mo.; Carl A. Hedblom, Rochester, Minn.; Major Gabriel Seelig, St. Louis, Mo.; Alleen B. Kanavel, Chicago, Ill.; Willard D. Haines, Cincinnati, Ohio; Charles F. Hoover, Cleveland, Ohio; Frank Smithies, Chicago, Ill.; Louis G. Heyn, Cincinnati, Ohio; Walter M. Boothby, Rochester, Minn.; Alfred Stengel, Philadelphia, Pa.; James B. Herrick, Chicago, Ill.; Clyde L. Cummer, Cleveland, Ohio; Chevalier Jackson, Philadelphia, Pa., and William L. Benedict, Rochester.

In arranging the program the Committee has provided for dry clinics in the forenoon and scientific addresses in the afternoon of each day.

In view of the high character of the program to be presented, we feel justified in asking the medical profession outside of Indiana to attend the Indianapolis session and we desire to assure the members of your Association that they will be cordially welcomed at Indianapolis on the dates mentioned.

Sincerely yours,

THE INDIANA MEDICAL ASSOCIATION.

Samuel E. Earp, President,  
Charles N. Combs, Secretary.

Editor of the Journal of the Michigan State Medical Society:

I have your letter of August 6th in regard to the Chiropractors, and when I got back this morning from a week's trip I found a copy of the letter they had mailed out, and evidence that they had circulated a number of petitions for me. Naturally I am not refusing any legitimate help in my campaign, and it is evident their letter which you quote, that their interest is largely their opposition to Dr. Stewart of Flint.

I think also that the records will show that I voted for their bill when it was up a session or so ago, believing that they were better under regulation of some kind, than running around loose.

I think my record in regard to health legislation in general, speaks for itself.

I was a member of the Public Health Committee for two sessions, and chairman of it one session.

Dr. Olin or any other who have been in touch

with matters of Lansing, can give the best estimate of my past position.

Yours very truly,  
George W. Welsh.

## *State News Notes*

### COLLECTIONS

Physicians' Bills and Hospital Accounts collected anywhere in Michigan. H. C. VanAken, Lawyer, 309 Post Building, Battle Creek, Michigan. Reference any Bank in Battle Creek.

NURSES' private home, invites convalescents and invalids; best of care, fine location. R. Rs. N. Y. C. and Interurban; best of references given. For particulars write Bessie Bileth, 566 Ely Street, Allegan, Mich.

Dr. Neil Hoskins spent his vacation at his old home in Vermont.

Dr. W. D. Ryan of Detroit, recently spent a month in Chicago, attending clinics.

Dr. and Mrs. L. E. Henrich are the proud parents of a baby son, born during the latter part of July.

Dr. and Mrs. T. P. Clifford spent the month of August in New Hampshire and along the Maine coast.

Dr. R. M. McKean returned the last week of July from a three months' trip on the continent.

Dr. Chas. Lakoff, formerly Chief Resident Surgeon at Detroit Receiving Hospital, is now located at 62 Adams Avenue, West.

Dr. Robert Novy, formerly associated with Dr. E. W. Haass, is now located in the David Whitney Bldg., Detroit, where he is specializing in Internal Medicine.

Dr. Harold R. Roehm is now associated with Dr. E. W. May in the David Whitney Bldg., Detroit, limiting his practice to Pediatrics.

Dr. Viola M. Young has opened an office at 806 Kresge Bldg., Detroit.

Dr. Varniem Southworth of Monroe, who was married in June to Miss Helen McCorkle of Detroit, is now associated with his father, Dr. C. T. Southworth, at Monroe.

Dr. and Mrs. Douglas Donald enjoyed their holidays in New Hampshire.

Dr. George Reberdy recently spent some time in New York.

Dr. George Campau of Detroit, spent the month of July at Cherry Beach.

Dr. and Mrs. L. J. Hirschman are enjoying a pleasant summer in Europe.

Dr. Emil Amberg is in Europe at the present time.

Dr. Wesley Willson enjoyed a vacation period in the east during the early part of August.

Dr. W. A. Defent spent some time during August fishing on the shores of Lake Superior.

Married, on August 14th, at Sylvan Lake, Dr. Harry E. Knight and Miss Kathleen Jane Wiloughby.

Dr. W. T. Dodge, of Big Rapids, has been elected President of the Board of Trustees of the Ferris Institute.

St. Mary's Hospital, Grand Rapids, is planning a campaign this fall to raise \$500,000 to build a new unit to its present building.

Dr. S. W. Sippy, of Chicago, died at his summer home near Ludington on August 15th. The doctor died suddenly while planting some trees.

We repeat once more the invitation extended to our members to send in news items for publication. Our news item columns are a chronological medical history of the profession that become extremely valuable as time passes. Please assist in keeping up the record.

Dr. J. D. Brook, Grand Rapids, attended the Annual Meeting of the Upper Peninsula Medical Society at the Soo.

Dr. Eugene Boise, Grand Rapids, has been confined to his bed for several weeks. Latest reports are that he is improving.

Dr. P. M. Hickey of Ann Arbor, toured Michigan resorts during August. He also visited the new Butterworth Hospital that is in progress of construction in Grand Rapids.

Dr. V. C. Vaughan spent the vacation period at his summer home in Old Mission. Dr. Vaughan also delivered a series of lectures at the Summer School of the University of Iowa during the first part of July.

A certain "Chiro" of Jackson is threatening to mandamus the City to force it to permit him to practice in their City Hospital. It is but an effort to secure personal advertising.

If you are not subscribing to Hygeia you are failing to support your national organization which is active at all times to enhance your personal interests. Subscribe today.

Doctor, you cannot afford to miss hearing the papers at the Annual Meeting at Mt. Clemens, Sept. 9-10-11th.

Dr. Guy L. Connor spent the month of August at Mackinac.

Speaker Moll has determined to call all sessions of the House of Delegates promptly at the hours designated.

Dr. A. W. Hornbogen of Marquette devoted two weeks in August to an auto tour of Minnesota, visiting relatives and friends of his boyhood days.

Dr. M. Fishbein, W. C. Braun and Dr. W. Warren of Chicago, were golfing guests of Drs. Pritchard, Mortensen and Eggelston of Battle Creek on August 8, 9 and 10.

Dr. A. H. Edwards, Grand Rapids, spent two weeks of August at the Northern resorts.

Doctor, to acquit yourself of your citizenship privileges you must vote. To vote you must register. Attend to this.

## Deaths

*George D. Carnes, M. D.*, South Haven. Age 73. Died on August 1st, after an active practice of nearly fifty years. Dr. Carnes was a member of the Kalamazoo Academy and the State Society. At his funeral that was held on August 3rd, Dr. J. B. Jackson of Kalamazoo, at the family request, paid the deceased the following tribute:

"We have come today to honor the memory of a fellow worker. We are brought once more to realize that as the years go by, one by one, we must fall from the ranks, to have our places taken by others. In the loss of Dr. Carnes the medical profession has lost one whose place in the ranks will be very difficult to fill. For many years we have depended on his counsel as a wise physician and loved him as a dear friend, and now he has gone from us and we shall miss his counsel and his friendship.

He represented to a large degree our ideal of a doctor. He was always a seeker after what was new in the practice of medicine. He never lost the attitude of the student. He never grew too old to learn. His interest and enthusiasm for the new developments in medical science was, however, tempered by his sound judgment and broad experience. He was able to make use of the new without letting go of the old truths that have stood the test of time.

On account of his wide knowledge of medical literature and his years of experience in practice, his counsel and advice was always most valuable. We all had the highest regard for his judgment and skill. In his death we have lost a man of rare ability and judgment, both as a practitioner and a consultant.

In our medical organization he was deeply interested. He always took an active part in the work of the Kalamazoo Academy of Medicine. He became a member of this in November, 1886. He served as our president in 1890. For many years he was a member of the Board of Censors, the executive committee, of the Academy. When the Academy became affiliated with the reorganized State Medical Society he was appointed as Councilor of the Fourth District representing Van Buren, Kalamazoo, Cass and Allegan Counties. In this capacity he rendered valuable service in the management of our State Society.

Thus he had a large part in shaping the policies and activities of both our State Society and of the local Academy. His good judgment and sound common sense made him one upon whom we always depended for correct decisions and advice in regard to matters of medical organization.

We shall miss Dr. Carnes as a wise physician and a valuable consultant. We shall miss him as a leader and advisor in our Medical Societies. But even more than this we shall miss him as a true friend. His perfect honesty, his absolute integrity, his fairness in all differences of opinion, his loyalty and sincerity made him a man whose friendship was prized by all. Those who knew him best loved him best. I think we shall always remember him as one who was a true friend. We shall all be better physicians and better men because we have known him and had him as a friend.

Dr. Carnes has gone from this world of toil and struggle, but his spirit and his memory have not perished. These shall live on to inspire us in our toil and struggle. We shall remember him and his memory shall help us to higher and nobler achievements in our work as physicians. (Continued in Adv. Sec. p. XIV.)